DOCUMENT RESUME

ED 211 681 CE 030 906

TITLE	Youth Unemployment. The Causes and Consequences.
INSTITUTION	Organisation for Economic Cooperation and Development, Paris (France).
REPORT NO	ISBN-92-64-12137-4
PUB DATE	80
NOTE	133p.; Small print may be marginally legible.
AVAILABLE FROM	OECD Publications and Information Center, Suite 1207, 1750 Pennsylvania Ave., N.W., Washington, DC 20006 ($8.00).
EDRS PRICE	MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS	Adolescents; Change Strategies; Demography; Economic Climate; *Economic Factors; Employment Level; *Employment Patterns; *Employment Projections; Foreign Countries; *Futures (of Society); Individual Characteristics; Individual Needs; Labor Force; Labor Turnover; Longitudinal Studies; Models; Occupational Aspiration; Program Descriptions; Promotion (Occupational); Salary Wage Differentials; Sociocultural Patterns; Trend Analysis; *Unemployment; Wages; *Youth Employment
IDENTIFIERS	Organisation for Economic Cooperation Development

ABSTRACT

This report examines the causes and consequences of youth unemployment in Organisation for Economic Cooperation and Development (OECD) member countries. Summarized first is the youth unemployment situation since the 1974/1975 recession. In a section on recent developments in youth labor markets a series of tables and graphs provide data on youth unemployment from 1955 to 1979 for most OECD member nations. Covered in a discussion of the medium-range outlook for youth unemployment are the following topics: an economic-demographic model of youth unemployment, youth unemployment projections for 1980-1981, the impact of demographic changes over the medium term, and labor force participation rates. A microeconomic analysis of youth labor markets is presented. Addressed in the analysis are high turnover rates among youth, the "hard-core" element in youth unemployment, and possibilities for generalizing findings to other OECD member countries. The role of relative wages, dead-end jobs, youth aspirations and the private and social costs of youth unemployment are explored. Appended to the report are a paper focusing on the advantages of using longitudinal data for analyzing youth labor markets and an inventory of measures to assist youth introduced by OECD member nations over the past three years. (MN)

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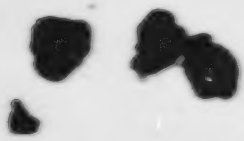
YOUTH UNEMPLOYMENT

THE CAUSES AND CONSEQUENCES



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PARIS 1980

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Publié en français sous le titre :

LE CHÔMAGE DES JEUNES
CAUSES ET CONSÉQUENCES

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INTRODUCTION

The OECD Secretariat first prepared a detailed analysis of the youth unemployment situation in Member countries for the High Level Conference on Youth Unemployment which took place at the Organisation's headquarters in Paris on 15 and 16 December 1977. Subsequently, a programme of work on youth unemployment, to be carried out under the auspices of the Manpower and Social Affairs Committee, was adopted by the OECD Council.

As part of this work programme the Secretariat is committed to updating and extending the diagnosis of the problem which was prepared for the High Level Conference. (1) The aim has been to establish whether the analysis of the causes and consequences of youth unemployment set out in the first diagnosis still seems valid or whether modifications need to be made in the light of new data and research findings.

This report mainly consists of such a revised analytic study of the youth labour market in the OECD area. The first section presents a short summary of the most salient points and discusses some of the main implications of the study for policy-making. The second section presents an overview of trends in the main statistical indicators, paying particular attention to recent developments since 1976. The third section outlines a simple economic-demographic model of youth unemployment. The model is then used to forecast the short-run outlook for youth unemployment in the major OECD economies in the wake of the second oil price shock. The model is also used to simulate the likely impact of demographic forces on youth unemployment over the medium term. Section IV presents a review of the main findings of recent research into the functioning of youth labour markets and the possible effects of early unemployment. The final section discusses some important and still unresolved issues about youth employment and unemployment.

There are also two annexes to the report. The first was prepared by a consultant, the late Professor Edward Kalachek of Washington University, St. Louis. This paper focuses on the methodological and empirical advantages of longitudinal data for analysing the youth labour market. Some examples of longitudinal surveys in selected OECD countries are discussed and there is a review of the research which has been carried out with these data. The second annex contains an inventory of measures to assist young people introduced by Member countries over the past three years. It updates a report which was prepared for the High Level Conference. (2).

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1) OECD, "Youth Employment and Unemployment : Diagnosis", Youth Unemployment, Vol. I, Paris, 1978.

2) OECD, Youth Unemployment, Vol. II, Paris, 1978.

I. SUMMARY AND LESSONS FOR THE FUTURE

The evidence clearly indicates that there has been no general improvement in youth unemployment in the OECD area over the past four years despite various policy interventions in favour of young people in many Member countries. Despite a slight improvement in 1979 youth unemployment rates in most countries are still well in excess of their 1976 levels and in many cases there has been a further deterioration in the ratio of youth to adult unemployment rates. There are relatively few exceptions to this rather depressing picture. Austria, Luxembourg and Switzerland are the only countries where there is no youth unemployment problem.

There is also a small group of countries - Finland (in 1978-79), Germany, the United States and the United Kingdom - where youth unemployment has improved very significantly over the past few years. While aggregate demand expansion has been a major factor in lowering youth unemployment in this latter group of countries, perhaps with the sole exception of the United Kingdom, this improvement clearly also owes something to the large-scale selective policies which these countries have introduced to strengthen youth employment prospects.

On the basis of a detailed study of the various indicators of unemployment such as trends in average duration, long-term unemployment etc., two findings were highlighted. First, young adults have fared less well than teenagers in some countries since 1976. Second, females have generally fared less well than males within both age groups.

The employment-population ratio (i.e., the proportion of people within a given age group who are in employment), however, has also risen in most countries among young adult females at the same time as their relative share of unemployment in the age group has increased. This in turn reflects a more rapid rate of growth of labour force participation among young adult females than their male counterparts. Indeed, in several countries, notably in North America, Australia and Sweden, the overall labour force participation rate among young people has risen since 1976 while in Germany, Japan and the United Kingdom the long-run decline in the youth participation rate appears to have been arrested recently.

It appears as if the period since the 1974/75 recession has witnessed changes in the decision to remain in school or seek work in some countries, especially among teenagers, which have potentially important consequences for policy making but which are difficult to interpret with the existing data. A decline or a decrease in the rate of growth of school enrolment among young people of working age could reflect a falling expected rate of return on investment in additional years of schooling or higher education combined with the effects of selective policies in favour of youth

which create an incentive at the margin for young people to quit school and enter the labour force. Alternatively, there may be a further blurring of the school-work dichotomy in that more young people decide to stay in school and also participate part-time in the labour market. This pattern, which is already very familiar in North America, appears to be spreading to other Member countries. It is also noticeable that there has been a rapid spread of part-time working among young people in recent years.

There appears to be broad agreement in the research literature that the current problem stems from three sources, though there is much less agreement about the exact contribution of each :

i) Sluggish economic growth in most Member countries since the 1974/75 recession has obviously reduced demand for labour compared with previous trends. Because youth employment typically declines relative to that of adults during a recession, slower growth of aggregate demand has especially curtailed the job opening available for young people and has widened youth-adult unemployment differentials.

ii) Demographic factors have also exacerbated the youth unemployment problem. The "baby boom" generation entered the labour force in greater numbers in the mid-1970s, at a time when the demand for labour was weak. This caused difficult and protracted adjustment problems in youth labour markets.

iii) Structural factors are also important. The competitive position of young people in the labour market is significantly weaker than that of other age groups. Older workers tend to be protected by job security legislation, collective bargaining agreements and conventional personnel practices. Trends in relative wage and non-wage costs may also have inhibited the willingness of employers to hire and train young people. Finally a combination of changing youth aspirations towards work, together with the expansion of income-support programmes and multiple-earner households, may have weakened youth labour force attachment, especially among teenagers.

In an attempt to quantify some of these influences the Secretariat specified a simple economic-demographic model which relates movements in youth unemployment rates to a set of cyclical, demographic and trend factors. The econometric results showed that the aggregate demand variable was consistently the single most important influence on youth unemployment. In some countries there was clear evidence that a growing share of young people in the population of working age has tended to increase youth unemployment over the past decade. In many countries there was also evidence of a significant secular deterioration in the ratio of youth to adult unemployment rates over and above the influences of cyclical and demographic factors.

The short-term outlook for youth unemployment in the wake of the second oil price shock is extremely gloomy. Youth unemployment rates have already begun to increase in several Member countries in line with the rapidly deteriorating labour market situation. Recent Secretariat forecasts for the seven largest Member countries point to a very large increase in youth unemployment up to the end of 1981 : on average youth unemployment rates are projected to rise by more than one-third over their 1979 levels.

The medium-term outlook for youth unemployment to 1985 and beyond is also rather bleak if GDP growth continues to be sluggish and Member governments do not intervene with specific policies to bolster youth employment prospects. Demographic shifts will clearly affect the magnitude of the problem over the medium term. In countries where the share of young people in the population of working age is falling or is projected to decline over the next few years, this factor should ease youth unemployment somewhat. However, the timing of the turnover in the youth share varies between countries; in some Member countries the youth share is projected to increase in the early 1980s so that these countries are unlikely to benefit significantly from the demographic shift until 1985 at the earliest.

In those countries where the teenage and young adults' share of the working population declines, this will also tend to change the structure of relative wages. A decline in the youth share over the coming decade should tend to increase somewhat the relative wages of young people at the expense of prime-age and older workers.

There is a great deal of uncertainty about the likely behaviour of youth labour force participation rates over the medium term. On the one hand, a further period of slow growth could lead young people to stay on longer in the schooling system or withdraw from the labour force, with a resultant decline in labour force participation. This would tend to lower measured youth unemployment but would at the same time put increased pressure on educational expenditures while possibly creating a larger group of discouraged young workers.

On the other hand, there may be a further blurring of the distinction between being in school or in the labour market as young people search for part-time work, especially in the secondary labour market, while remaining in school. Such a situation would likely give rise to an increase in measured unemployment and to more extensive labour market segmentation, though for many young people such a combined school-work option may considerably ease their transition into working life. Finally, continued slow growth may induce a decline in labour-force participation of marginal workers such as migrants, retired people, the disabled etc., and this in turn may improve the employment chances of young people entering the labour market. However, apart from the questionable social merits of shifting the burden of unemployment or discouragement to others, at best this is only likely to release jobs in the secondary labour market and in this market young people are relatively competitive.

Over the past few years the most effective policy to fight youth unemployment - expansionary demand management - has been seriously constrained by the underlying rate of inflation of most OECD economies, which was thought to be too high to permit a more buoyant level of economic activity. Policies for dealing with youth unemployment were, therefore, confined to selective labour market measures and preventive educational policies. In so doing, a great variety of education and manpower programmes have been adopted. (For a detailed inventory of these special measures see Annex II.)

Without major improvements in general demand conditions and/or reduced demographic pressures, the key policy question remains whether the longer-term social

and economic costs of youth unemployment warrant a major increase in public expenditure in favour of youth, both through employment and education measures, in spite of medium-term ceilings on overall public spending. Proposing a radical and aggressive policy to fight youth unemployment would therefore require a statement about what other expenditures could and should be cut, and the political acceptance of such cuts would need to include the possible displacement of employment opportunities elsewhere in the economy.

A more limited policy objective would aim to counter-act the structural component in present and future youth unemployment. Measures in this context would include increased efforts to prepare young people for the world of work, remedial education and direct job creation measures in favour of those for whom the "market does not work", the early identification of potential risk groups and special programmes for the long-term or recurrently unemployed, especially among the 20-24 year olds. This could also include differential minimum wages in those cases where existing wage relativities reduce the employment chances of young people, and the removal of institutional and attitudinal barriers to the hiring of young people at the level of the enterprise.

Common to all these measures is the aim of improving the competitive position of young people in the labour market and, thus, limiting the adverse impact of early spells of unemployment on future developments. This holds for the individual, who otherwise runs the risk of foregoing future income or of becoming permanently dependent on welfare, as well as for the functioning of the labour market in general: lack of work experience for today's youth will reduce the potential of the labour market of tomorrow to respond effectively and rapidly to structural change and might thus become an impediment to non-inflationary growth.

Youth employment policies conceived and designed to prevent a further rise in the structural component of current unemployment can be viewed as part of a whole range of supply-side policies designed to improve the functioning of the labour market and raise future productivity performance. That an investment in the future in the form of youth employment policies is likely to yield considerable social and economic returns can be gauged from current demographic projections which suggest that those in employment will have to carry the welfare burden of a rapidly ageing population in virtually all OECD countries.

A structural medium-term policy in favour of young people would require at a minimum the maintenance of existing resources even if overall expenditures need to be curbed for reasons of macro-economic policy. Indeed, in many countries the prevention of a further deterioration in youth labour markets is likely to require a significant increase in resources. At the same time, such an increase can only be justified if policy-makers actively review and improve the current mix of policies, especially the relationship between remedial and preventive measures, in order to maximise the returns from expenditures. Experience over the last four years and the available research into the functioning of youth labour markets suggest several areas in which policy reforms would be advisable so that the intended result per unit of expenditure could be maximised.

The following characteristics of youth labour markets appear especially pertinent in considering appropriate reforms of existing programmes :

i) Much of the large age differentials in unemployment reflect very high turnover rates among young people. Young people also have a much higher propensity to withdraw from the labour force than adults so that simply focussing on youth unemployment alone may underestimate the size of the problem, especially for teenagers.

ii) Most young people make the transition from school to work without serious long-term costs to themselves or to society. In some countries they experiment a great deal in the first few years after leaving school. They move rapidly between jobs and relatively short spells of unemployment before settling down to a more stable career pattern after a few years.

iii) A minority of young people experience serious difficulties during this transition period. They lead a sort of "twilight existence" in the labour market, experiencing prolonged spells of joblessness interspersed with brief spells of unsatisfactory employment. The evidence also tentatively suggests that these early labour market problems do not disappear with the passage of time. In particular, early unemployment appears to result in lower earnings in the future.

iv) Membership of this hard-core group is not randomly distributed over the youth population. Instead, youth with multiple socio-economic disadvantages, e.g. low educational attainment, physical and/or mental handicaps, ethnic minorities, young girls with early pregnancies, etc., are most likely to comprise the bulk of young people in this high-risk group.

This analysis clearly suggests that it is vital in youth programmes to give major attention to the specific problems of such hardcore disandvantaged young people. Since many of the roots of unsuccessful labour market experience go back to childhood, a heavy burden of preventive action falls on the education system. The early identification of potential "problem" groups and appropriate educational responses as well as a broad-based preparation for the world of work affecting everybody are called for.

Once in the labour market many school leavers are not in need of public help. While many young people experience unemployment immediately on entering the labour market, entrance unemployment is not a good predictor of future problems in the labour market. However, with the exception of some public sector employment and wage subsidy measures, the major emphasis of youth measures has been on young people very recently out of school. Such a policy runs the real danger of taking into programmes young people who are either not in real need or only in marginal need, at the expense of those who are genuinely at greatest disadvantage in the labour market.

Empirical evidence for some countries shows a growing trend towards greater concentration of long-term unemployment among young people in the 20-24 age group, rather than among teenagers. This shift in the age structure of unemployment among young people may well be exacerbated over the next five years by demographic forces.

In many OECD countries the share of the 20-24 year olds in the population of working age is projected to increase until around 1985 while the share of teenagers is already declining or projected to decline over the next few years. In such cases there is a need for a major shift of emphasis in policies for young people to help ease the problems of young adults rather than adolescents, especially for those with poor work histories since leaving school.

There is much disagreement over both the causes and consequences of high rates of job turnover among young people. While one would expect higher rates of turnover among new labour force entrants as they search the labour market and gain useful knowledge about existing and future opportunities, turnover rates among the young have often become abnormally high. This suggests a need for a better understanding of the demands and opportunities of the world of work on the part of young people while still in school. It is also vital actively to involve employers in this process since measures designed to raise the credentials and, hence, the employability of disadvantaged young people may flounder unless employers can be convinced that such programmes are developing useful work skills.

There appears to be no evidence which would allow one to conclude that early unemployment is less costly for young females than for young males. Indeed, given the empirical evidence which suggests that the unemployment position of young females has worsened relative to young males in many countries since 1976, policy makers need to be vigilant to ensure that the needs of young females are adequately catered for by existing and future programmes.

There are two further aspects of youth employment and unemployment which could have major significance for policy but about which there is little agreement. First, there is the common argument that recent developments in relative wage and non-wage costs have tended to price young people out of jobs. Such trends in youth relative wages may be due to several factors e.g. changes in the structure of minimum wages, equal pay legislation, a growing proportion of young people being paid at adult rates, or to demographic factors. The empirical evidence on the issue is conflicting and difficult to interpret. Nevertheless, one might tentatively conclude that, while movements in relative wages have added to youth employment difficulties in some countries, the quantitative magnitude of this effect is unlikely to have been very large.

There is also the vexing issue of youth aspirations towards work and leisure. Some have argued that, as a result partly of increasing affluence and the spread of education, the attitudes of young people towards work are changing. Young people's aspirations have been raised, it is claimed, and they are no longer willing to accept certain kinds of jobs. The evidence on this issue is sparse and capable of several different interpretations. However, it seems clear that unsatisfactory initial labour market experiences do tend to lower self-confidence among young people and that this loss of self-esteem can be manifested by rather apathetic behaviour among young people. This suggests that policies to aid the disadvantaged youth should also pay attention to improving their self-confidence as well as attempting to upgrade their basic skills.

II. RECENT DEVELOPMENTS IN YOUTH LABOUR MARKETS

Recent years have shown that the burden of high unemployment is unequally distributed over the labour force, with young people being particularly vulnerable. Given the sluggish growth of GNP over the past three years, it is not surprising that the OECD area's youth (1) unemployment problem has worsened. For the OECD area (excluding Turkey) the youth unemployment rate was estimated at 11.3 per cent in 1979 compared with 10.4 per cent in 1976. Since the total unemployment rate declined slightly over the same period, the share of young people in total OECD unemployment has risen from 44 per cent in 1976 to 47 per cent in 1979.

The problem of youth unemployment is currently most acute in Italy (2) and Spain, where more than one-fifth of the youth labour force is unemployed, followed by Portugal, France, Canada, Australia, the United Kingdom and Finland, where youth unemployment rates are above the OECD average. Youth unemployment appears to be much less of a problem in Sweden, Germany, and Japan, while it is virtually non-existent in Austria, Luxembourg and Switzerland.(3) Data by country (Table 1, see also Chart A) show that, by and large, the main deterioration in youth unemployment rates occurred between 1973 and 1976, although in many cases they continued to increase over the subsequent two years. In the fourteen countries for which 1979 data are available, current rates are in excess of their 1976 levels in all but three cases, Germany, the United Kingdom and the United States. However, the situation seems to have improved somewhat in 1979 ; in eight countries youth unemployment rates in 1979 were below their 1978 level, most markedly in Canada, Finland, Germany, Sweden and the United Kingdom. The situation continued to deteriorate in Italy, New Zealand, Norway, Portugal and Spain, while there was a sharp rise in youth unemployment in France in 1979 after two years of stability.

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1) The term "youth" generally refers to the 15-24 age group. There are some exceptions to this, e.g., Norway, Sweden, the United Kingdom and the United States, where the data refer to the 16-24 age group and Belgium, Ireland, Italy, the Netherlands and Spain, where the data refer to the 14-24 age group. For further details see the individual country notes to the tables.

2) The Italian rate is the highest among Member countries and has shown no improvement over the last three years. The Italian figures before and after 1976 are not directly comparable because of a change in the classifications and definitions of the quarterly labour force sample survey.

3) Youth unemployment rates in Austria and Switzerland in 1979 were estimated by the OECD to be 1.1 (for persons aged less than 30) and 0.4 per cent respectively.

Table 1

YOUTH[a] UNEMPLOYMENT RATE 1960-1979

	1960	1965	1970	1973	1976	1977	1978	1979
Australia		2.6(b)	2.3	3.3	9.6	12.0	12.4	12.0
Belgium				3.0	7.7(i)	11.2		
Canada	10.7	6.5	9.9	9.5	12.6	14.3	14.3	12.9
Denmark					13.0	13.7	13.9	
Finland		(2.3)	2.9	4.5	8.0	13.6	16.3	11.7
France	4.2(c)	4.1	5.6	6.1	10.1	11.1	11.0	13.3
Germany	0.7(d)	0.2	0.4	1.0	5.2	5.4	4.8	(3.7)
Ireland	11.4(g)		9.1(h)		14.8(i)	14.4		
Italy	3.1	8.4	9.7	11.9	13.9	22.9	23.9	24.6
Japan	1.4	1.2	2.0	2.2	3.1	3.5	3.8	3.6
Netherlands				3.0	5.7(i)	5.6		
New Zealand					0.8	1.1	3.3	3.6
Norway				5.6	6.0	5.0	5.9	6.6
Portugal				2.2(f)	11.4	14.9	16.8	17.5
Spain		1.7(e)	2.4	4.6	11.2	14.1	19.1	22.8
Sweden		2.3	2.9	5.3	3.7	4.4	5.5	5.0
United Kingdom		(1.2)	2.9	2.8	12.5	14.3	13.5	11.9
United States	10.0	9.1	9.9	9.8	14.0	13.0	11.7	11.2

a) Defined as unemployed aged 15-24 as a percent of total labour force aged 15-24 (including all armed forces) unless otherwise specified.
b) Rate for 1966.
c) Rate for 1962.
d) Rate for 1968.
e) Rate for 1967.
f) Rate for 1974.
g) Rate for 1961.
h) Rate for 1971.
i) Rate for 1975.
Figures in parenthesis are Secretariat estimates.

Source Notes

Data are from national sources and replies to various OECD questionnaires of the MSA Committee. Where data are published for civilian labour force only or where data exclude conscripts, the Secretariat made the necessary adjustments with respect to the denominator. Annual figures are the average for the year unless otherwise specified.

Australia Annual rates refer to August of each year. Rates for 1966-1973 refer to civilian labour force only.

Belgium Data from Eurostat, The Labour Force Sample Survey. Rates are for the age group 14-24. There is a break in the series 1975/77.

Canada Figures have been revised from 1970 onwards, hence figures for earlier years are not strictly comparable with the revised figures.

Denmark Data refer to May 1976, April 1977 and April 1978.

Finland Figures have been revised from 1976 onwards and are not strictly comparable with those of earlier years.

France Data are from the March labour force surveys carried out by INSEE (except for 1962 from the October Survey). New definitions of unemployment and labour force were introduced into the survey in 1975 in line with the ILO definitions, hence earlier figures (which include the marginal labour force and the marginally unemployed) are not consistent with those of 1975 and after. Rates for 1962, 1965, 1970 and 1973 based on census definitions are 2.9, 3.0, 3.0, 3.8 respectively.

Germany The 1960-1973 data include 14-year-olds - unemployment figures refer to the registered unemployed at the end of September of each year. Labour force figures are based on various national sources including the microcensus.

Italy Rates are for the age group 14-24. Definitions used in the labour force survey were thoroughly revised in January 1977.

Ireland 1961 and 1971 figures from censuses of population. The 1975 and 1977 figures from Eurostat. The Labour Force Sample Survey Rates are for the age group 14-24.

Netherlands Data from Eurostat, The Labour Force Sample Survey. Rates are for the age group 14-24. There is a break in the series 1973/75.

New Zealand Unemployment figures refer to the registered unemployed aged 15-30 and are the average for 12 months. Labour force figures for 1976 and forecasts for 1977 and 1978 refer to the age group 15-29 at 31 March of each year.

Norway The rates are for the age group 16-24.

Portugal All rates refer to the first semester of the year ; rates for the second semester of 1974, 1975, 1976, 1977 are 4.1, 9.8, 13.9, 17.4 respectively.

Spain Rates are for the age group 14-24 and refer to the fourth quarter of each year. The labour force survey was revised in 1976, consequently figures for earlier years are not consistent with later years.

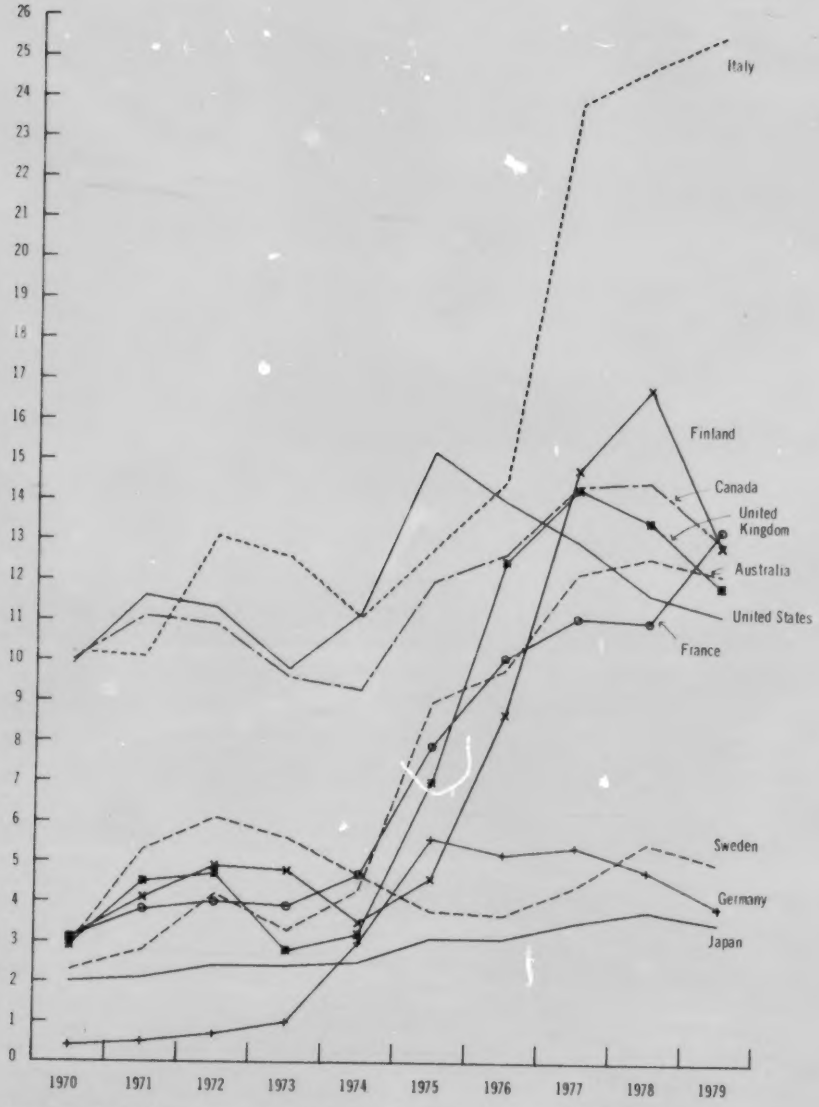
Sweden Rates are for the age group 16-24. The labour force survey was revised in 1970, hence figures for earlier years are not strictly comparable with later years.

United Kingdom All data refer to Great Britain only. The unemployment figures refer to registered unemployed aged less than 24 at July of each year and include school leavers. The labour force figures are for the age group 16-24 and refer to June of each year. July figures excluding school leavers for 1976, 1977, 1978, 1979 are 8.5, 9.4, 8.9, 8.0 respectively.

United States Rates are for the age group 16-24.

Chart A

YOUTH UNEMPLOYMENT RATES 1970 1979



Note : Data as for Table 1 except in the following cases. Rates refer to the civilian labour force for all years for Australia and Canada. Conscripts are excluded from the denominator in the case of Finland and Italy. Data prior to 1975 for France referring to census definitions have been adjusted in line with data for later years based on ILO definitions. Conscripts are included in the denominator for France.

The largest and most sustained improvements since 1976 have been recorded in Germany and the United States, where youth unemployment levels have declined by one-quarter.(1) In both cases, while aggregate demand expansion has undoubtedly contributed to this improvement, it also owes much to large-scale selective policies.(2) In Germany supply-side measures through a comprehensive system of vocational education, training and counselling measures have been important, while in the United States there has been a large investment in education, training and work experience programmes for young people. If these two countries are excluded from the area-wide unemployment rate, its deterioration is quite dramatic : the figure for the average youth unemployment rate increased from 8.8 per cent in 1976 to 12.5 per cent in 1979.

Youth unemployment rates are typically double or treble those of adults (Table 2). Italy and Norway, where youth rates are six times those of adults, have the most extreme differentials. Trends in this ratio since 1976 are diverse ; the ratio declined in six countries and increased in the others. It is worth noting that, while youth unemployment in the United States has declined steadily since 1976, this has not been accompanied by an improvement in the relative position of young people : the ratio of youth to adult unemployment rates has risen from 2.6 in 1976 to 2.9 in 1979. On an area-wide basis (excluding Turkey) the ratio is estimated to have risen marginally from 3.1 in 1976 to 3.3 in 1979.

Trends in the aggregate youth unemployment rate or the ratio of youth to adult unemployment mask significant age-sex differentials. It is important, at a minimum, to distinguish between teenagers and young adults (i.e., the 20-24 age group). Several significant patterns can be seen across the ten countries with relatively long time series on group-specific unemployment rates disaggregated by age and sex (Chart B) (3) :

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1) This improving youth unemployment situation in the United States has not been evenly spread over all young people. Declining unemployment rates have been mainly concentrated among young whites, while racial differentials have tended to deteriorate ; e.g., the ratio of black to white unemployment rates for male teenagers increased from 2.19 in 1973 to 2.27 in 1979 and 1.94 to 2.30 for young adults over the same period. For further details on the increasing racial differentials see Norman Bowers, "Young and Marginal : An Overview of Youth Employment", Monthly Labor Review, October 1979 ; and Morris J. Newman, "The Labor Market Experience of Black Youth, 1954-78", Monthly Labor Review, October 1979. However, the period since 1977 has witnessed an improvement in the employment situation of black youth which is not fully captured by the unemployment rate measure. During this period the employment gains for non-white male teenagers were significantly higher than those of white male teenagers, resulting in an increase in their employment/population ratio from 30.7 in 1977 to 33.6 in 1979. Similarly, there was an increase in the employment/population ratio for non-white female teenagers over the same period from 20.4 to 24.7. Part of this improvement must be attributed to specific manpower programmes for disadvantaged youth.

2) The improvement in the United Kingdom since 1977 also reflects the impact of special programmes to counter youth unemployment, particularly among teenagers. Since the Youth Opportunities Programme was launched, about 200,000 unemployed young people on average have participated in the schemes every year. For details see Manpower Services Commission, Review of the Second Year of Special Programmes. Manpower Services Commission, London 1980.

3) In the case of France teenagers refer to the 15-17 age group whereas young adults are the 18-24-year-olds.

Table 2

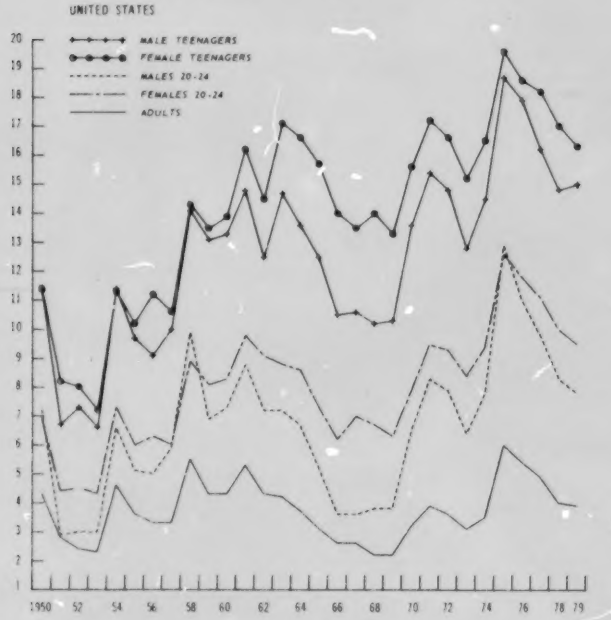
RATIO OF YOUTH TO ADULT UNEMPLOYMENT RATES 1960-79

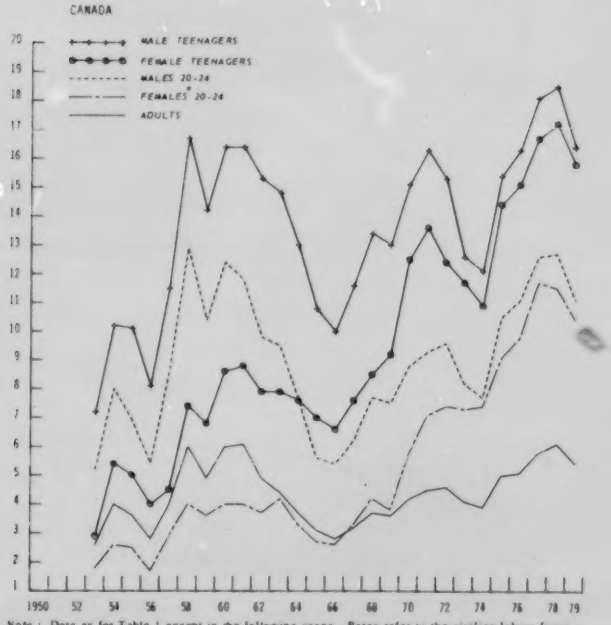
	1960	1965	1970	1973	1976	1977	1978	1979
Australia		2.1(a)	2.1	2.7	3.3	3.7	3.2	3.4
Belgium				2.3	3.3(k)	4.5		
Canada	1.9	2.1	2.4	2.4	2.5	2.5	2.3	2.4
Denmark					2.8	2.4	2.0	
Finland		(2.3)	1.8	2.6	2.7	3.2	2.7	2.4
France	2.5(b)	3.4	2.2	2.3	3.2	3.3	3.1	3.3
Germany	0.5(c)	0.5	1.0	1.3	1.7	1.8	1.7	(1.4)
Ireland	4.2(i)		2.0(j)		1.9(k)	2.0		
Italy	1.1	3.7	6.5	7.4	8.7	6.5	7.0	6.6
Japan	1.4	1.7	2.2	2.4	1.7	1.9	1.9	1.9
Netherlands				1.9	2.3(k)	2.7		
New Zealand					4.0	5.5	5.5	4.5
Norway				7.0	6.7	6.3	5.4	6.0
Portugal(f)				7.3(d)	3.6	4.5	4.8	4.5
Spain		2.1(e)	3.0	2.3	3.6	4.0	4.3	4.1
Sweden		2.6	2.4	2.8	3.1	3.5	3.5	3.3
United Kingdom(g)		(1.2)	1.5	1.4	3.4	3.6	3.5	3.3
United States	2.3	2.9	3.1	3.2	2.6	2.7	2.9	2.9

a) Data for 1966.
b) Data for 1962.
c) Data for 1958.
d) Data for 1974.
e) Data for 1967.
f) Ratios for second semester for 1974, 1976, 1977 are 5.9, 4.3, 5.1 respectively.
g) Ratios for July data, excluding school leavers, for 1965, 1970, 1973, 1976-1979 are 1.0, 1.3, 1.3, 2.3, 2.4, 2.3, 2.2 respectively.
i) Rate for 1961.
j) Rate for 1971.
k) Rate for 1975.

Chart B

AGE- AND SEX-SPECIFIC UNEMPLOYMENT RATES, SELECTED COUNTRIES

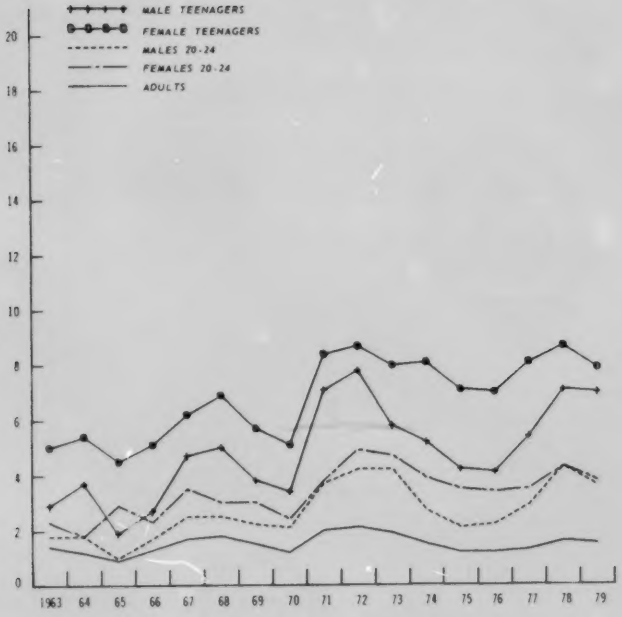




Note : Data as for Table 1 except in the following cases. Rates refer to the civilian labour force for all years for Australia and Canada. Conscripts are excluded from the denominator in the case of Finland and Italy. Data prior to 1975 for France referring to census definitions have been adjusted in line with data for later years based on ILO definitions. Conscripts are excluded in the denominator for France.

Chart B (Cont'd)

SWEDEN



AUSTRALIA

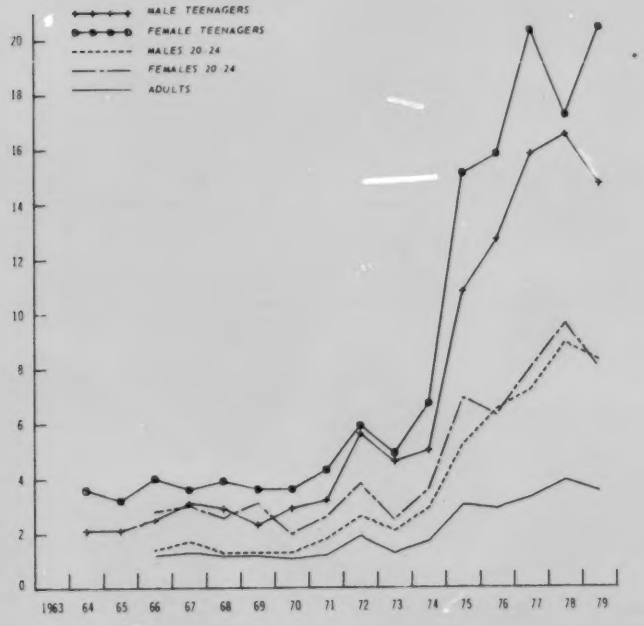
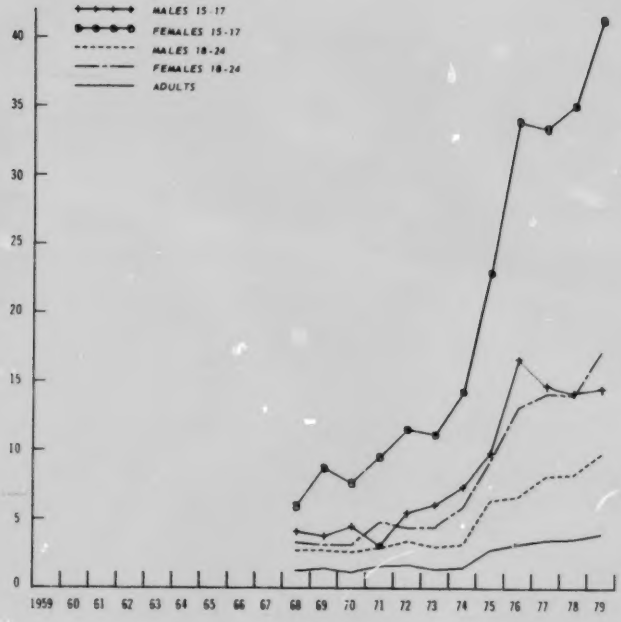


Chart B (Cont'd)

FRANCE



UNITED KINGDOM

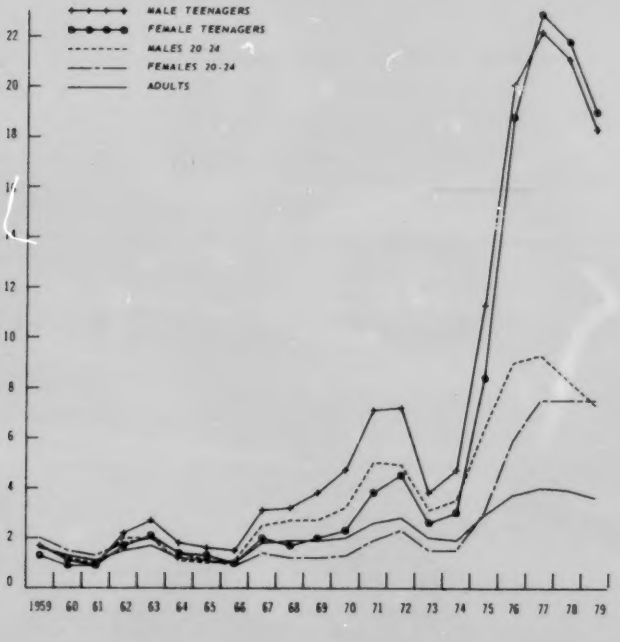
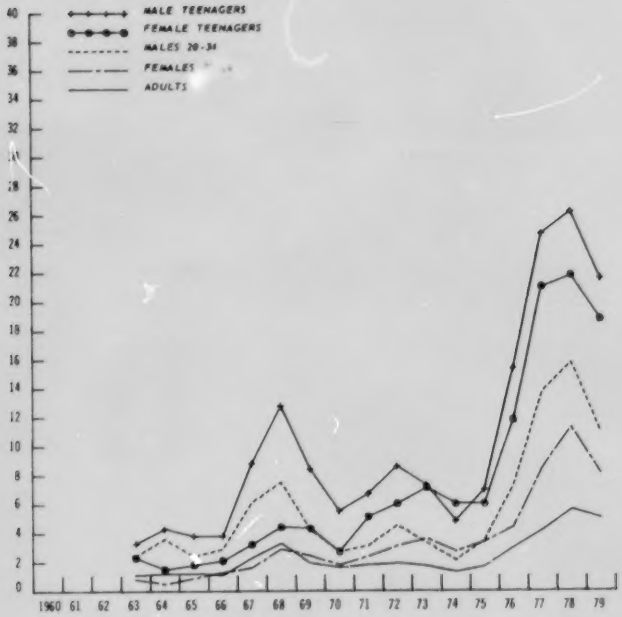


Chart B (Cont'd)

FINLAND



ITALY

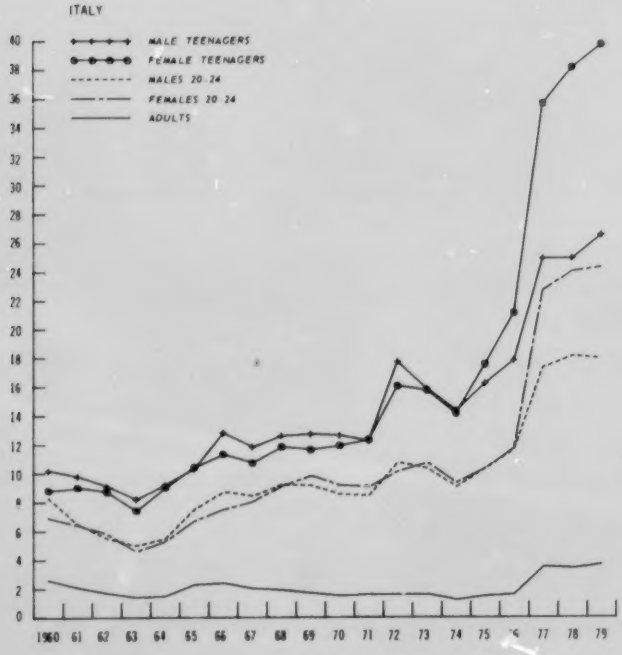
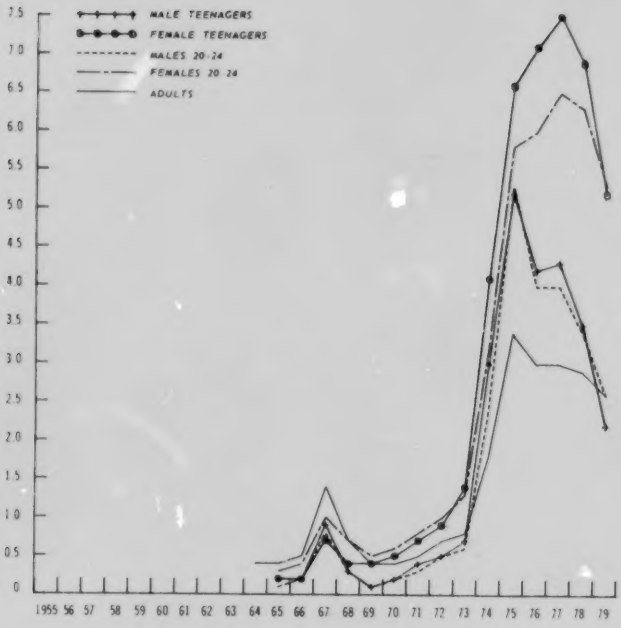
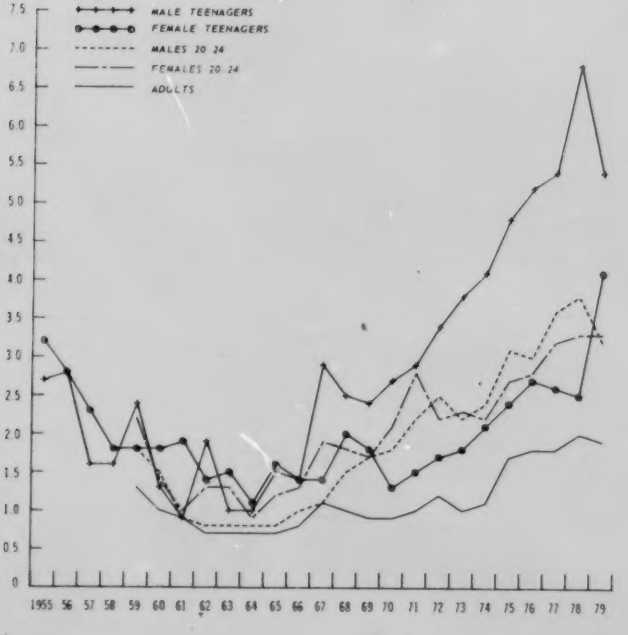


Chart B (Cont'd)

GERMANY



JAPAN



i) Unemployment rates are negatively correlated with age ; teenage unemployment rates are consistently higher than those of young adults, who in turn have higher unemployment rates than adults.(1) The few exceptions to this age pattern in the 1960s and early 1970s, e.g., male teenagers and young adults (Germany), young adult females (Canada, Finland, the United Kingdom), have now been reversed. The most skewed age differentials are in Italy, where unemployment rates among male and female teenagers are currently 8-12 times greater than the adult rate.

ii) In most countries there appears to be an upward trend in the entire group-specific unemployment rate structure since the early 1970s. There also appears to be a marked cyclical pattern in these group-specific unemployment rates ; this is especially noticeable in Canada and the United States.

iii) The pattern of youth unemployment also differs by sex. Teenage girls have generally fared worse than their male counterparts since 1976. Their situation is particularly difficult in France and Italy, where current unemployment rates are about 40 per cent for this group. Finally, the evidence of a deterioration in the unemployment position of females relative to males over the past three years is more pronounced among young adults. The worsening sex differential is particularly marked in Australia, France, Germany, Italy, the United Kingdom and the United states.

The youth unemployment rate in any given year depends on three factors : (i) the proportion of young people who experience a spell of unemployment over the year ; (ii) the average number of spells of unemployment per young person ; and (iii) the average length of an unemployment spell. In order to get a fuller picture of the hardship associated with any given level of youth unemployment, one would ideally like information on these three factors. In practice, data on both the percentage of young people who experience a spell of unemployment and on the frequency of spells are not readily available in most countries unlike data on the average duration of spells.(2) Thus, the following discussion confines itself to trends in average duration among unemployed youth.

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1) Even within these 5-year age groups, the negative association between ageing and unemployment rates is very clearly apparent. Data on unemployment rates were collected by single year of age for Australia, the Netherlands, Spain and Sweden and two-year age groups for Canada and the United States, for the most recent years available. These data (not shown) demonstrate this ageing effect very strongly e.g., 1979 unemployment rates in Sweden by single year of age are :

	Male	Female
16	9.9	9.9
17	9.0	9.3
18	5.8	8.8
19	5.3	5.3
(20-24)	3.6	3.8

2) Data for the United States indicate that much of the youth-adult differential is due to the higher proportion of young people who experience an unemployment spell over the year. See Kim B. Clark and Lawrence H. Summers "The Dynamics of Youth Unemployment", in Richard B. Freeman and David Wise (eds.), National Bureau of Economic Research Conference on Youth Unemployment (forthcoming).

The typical duration of youth unemployment spells is much shorter than for adults. However, when the labour market is depressed, the average duration of youth unemployment rises, as shown in Table 3.(1) Average duration increased sharply between 1975 and 1977 for teenagers and young adults in virtually every case. However, the pattern since 1977 is rather mixed.(2) Between 1977 and 1979 average duration for young people declined in Canada, Norway, Sweden and the United States but increased in all other cases. Indeed, in Canada and Sweden declining average youth duration contrasts sharply with recent experience among the adult unemployed. In the United States average duration has continued to decline for all age groups but the rate of decline since 1977 has been least among teenagers. In Australia, Belgium and the United Kingdom the percentage rise in average duration has been larger since 1977 for young adults than for teenagers.

An additional measure of the burden of youth unemployment is the youth share of long-term unemployment. Defining long-term unemployed as all persons unemployed for six months or over (3), Table 4 presents data on the long-term share of youth unemployment for both teenagers and young adults separately. Since 1975 the share of long-term unemployed in total youth unemployment has generally increased. Sole exceptions are Austria and the United States where the long-term youth share has declined in both age groups. Once again patterns are not uniform by age ; the percentage increases in the long-term share are generally much greater for young adults. This effect is particularly noticeable in Australia, Finland, Netherlands and the United Kingdom. An alternative indicator of relative hardship is the youth share of all long-term unemployed (Table 5). The picture here is rather mixed, especially if one compares the last few years with 1975 which was the trough of the recession in most countries. The share of young people in long-term unemployment has risen since 1975 in three countries (Australia, the Netherlands, Norway) while it has fallen in Austria, France, Germany and Sweden. For the remaining countries no clearcut pattern emerges.

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1) An important caveat needs to be registered here. The data in Table 3 refer to the average duration of unemployment spells at the time the survey was taken i.e., the average duration of interrupted spells. They do not measure the total length of time of a typical spell of unemployment for persons currently unemployed, i.e., the average completed duration of the spells of those young people currently unemployed. In a steady state where both the probabilities of exit from and inflow into unemployment are constant, there is a simple relation between the average durations of interrupted and completed spells of the currently unemployed. In such a situation the average duration of a completed spell for all unemployed persons is double the average duration of interrupted spells.

2) It is likely that these changing duration patterns partly reflect cyclical factors. Makeham argues that during a cyclical downturn (upswing) the median duration of unemployment among young people rises (falls) faster than for older workers. See Peter Makeham, Youth Unemployment : An Examination of Evidence on Youth Unemployment using National Statistics, Department of Employment Research Paper No. 10, London, March 1980.

3) Clearly the definition of "long-term" unemployment is rather arbitrary and national practices vary. Statistics were also collected for long-term unemployment defined as three months or over. The patterns revealed by these figures (not shown) were very similar to those in Tables 4 and 5.

AVERAGE DURATION(a) OF UNEMPLOYMENT (IN WEEKS)

Age Group	1975(h)			1977			1979(i)		
	< 20	20-24	25 +	< 20	20-24	25 +	< 20	20-24	25 +
Australia	13.2	9.8	13.5	21.1	17.8	22.9	25.9	27.9	30.5
Belgium(b)	3.8	6.2	25.4	6.0	11.1	25.9	6.8	14.6	29.4
Canada	12.2(f)		15.6	13.1(f)		15.8	12.6(f)		16.8
Finland							19.0	21.0	36.2
France	5.9(f)		8.7	7.3(f)		11.0	8.5(f)		12.8
Norway	5.0	5.7(c)	9.6(d)	5.5	7.1(c)	11.6(d)	5.4	6.6(c)	10.8(d)
Sweden	8.4	13.5	14.7	10.2	12.7	18.1	9.4	11.7	20.9
United Kingdom(e)	3.2	5.8	11.1(g)	5.5	12.7	14.3(g)	5.5	14.7	16.0(g)
United States	9.2	13.1	16.6	8.9	12.9	17.3	7.4	9.7	13.0

a) Figures refer to median duration in the case of the United Kingdom. b) Data in months.
c) Data refer to the age group 20-29. d) Data refer to persons aged 30 and over.
e) Data refer to Great Britain only. f) Data refer to the age group 15-24.
g) Data refer to persons of all ages. h) Figures are for 1976 in the case of Canada and Sweden.
i) Figures are for 1978 in the case of Norway and the United Kingdom.

Source : National sources, statistics refer to the registered unemployed in the following cases, Belgium, Finland, Norway and the United Kingdom ; for all other countries data are from Labour Force Surveys. Where data were available for a greater breakdown of age, the weighted average was calculated using as weights the numbers of unemployed. Figures shown are the average for the year in the case of Canada and the United States, the end of June for Belgium, May for Finland, March in the case of France, January for Norway, August for the 1976 figure for Sweden and for Australia for all years, July for the United Kingdom.

Table 4

LONG-TERM(a) UNEMPLOYED YOUTHS, AGED < 20, 20-24 AS A PERCENTAGE OF ALL UNEMPLOYED YOUTHS, AGED < 20, 20-24 RESPECTIVELY

	1973		1975		1977		1979(f)	
Age Group	< 20	20-24	< 20	20-24	< 20	20-24	< 20	20-24
Australia			17.1	9.8	31.7	23.5	39.2	36.5
Austria	12.1	14.0(b)	7.1	13.0(b)	4.3	11.9(b)	5.1	10.4(b)
Belgium			33.5	42.3	52.2	62.2	56.2	66.3
Denmark							29.4(c)	23.8(d)
Finland	19.0	13.0(b)	13.0	8.0(b)	24.0	18.0(b)	25.9	31.7(b)
France	28.5(e)		39.8(e)		44.6(e)		51.1(e)	
Germany	4.5	13.9	21.4	24.8	24.2	31.4	24.3	32.2
Japan					15.2(e)		27.0(e)	
Netherlands	8.4(h)	19.7(i)	18.9(h)	24.5(i)	27.8(h)	39.6(i)	25.5(h)	43.4(i)
Norway	3.1	1.1(b)	0.7	0.7(b)	1.9	4.2(b)	1.6	3.1(b)
Sweden					7.8	12.2	7.2	11.9
United Kingdom(g)			7.0	14.5	11.7	31.6	11.4	36.0
United States	3.8	5.8	6.3	13.3	6.4	12.5	4.1	6.6

a) Long-term is defined as 6 months and over in Austria, Belgium, Denmark, France, Germany, Japan and the Netherlands, as 26 weeks and over in Australia, Norway and the United Kingdom, and as 27 weeks and over in Finland, Sweden and the United States.
b) Figures refer to the age group 20-29.
c) Figures refer to the age group 15-17.
d) Figures refer to the age group 18-24.
e) Figures refer to the age group 15-24.
f) 1978 for Austria, Denmark, Japan and Norway.
g) Data for Great Britain only.
h) Figures refer to persons aged < 19.
i) Figures refer to persons aged 19-24.

Source : National Sources Registration Statistics for Austria, Belgium, Finland, the Netherlands, Norway and the United Kingdom, data for labour force surveys in all other cases. Data refer to the average for the year except in the following cases : August for Australia and Austria, June for Belgium, February for Denmark, May for Finland, Germany (the 1973 figure is for September) and the Netherlands, March for France, January for Norway, July for the United Kingdom.

Table 5

LONG-TERM(a) UNEMPLOYED YOUTHS AS PERCENTAGE OF ALL LONG-TERM UNEMPLOYED

Age Group	1973		1975		1977		1979(f)	
	< 20	20-24	< 20	20-24	< 20	20-24	< 20	20-24
Australia			34.3	11.4	40.1	15.4	35.8	20.3
Austria	2.8	30.2(b)	4.5	31.0(b)	1.8	16.3(b)	2.4	15.4(b)
Belgium			6.3	15.8	6.3	20.3	5.8	20.6
Denmark							3.2(c)	54.7(d)
France	25.9(e)		38.2(e)		37.2(e)		37.9(e)	
Germany	4.2	10.0	5.7	12.8	5.4	13.0	4.1	11.8
Japan					14.3(e)		22.7(e)	
Netherlands	1.6(h)	14.0(i)	5.5(h)	19.6(i)	4.8(h)	23.4(i)	6.3(h)	26.4(i)
Norway	6.4	4.3(b)	2.5	3.9(b)	3.0	11.5(b)	3.0	9.9(b)
Sweden					10.3	14.4	7.5	11.6
United Kingdom(g)			5.9	10.7	9.7	14.5	5.7	11.4
United States	13.9	16.9	9.2	20.5	10.3	19.4	12.2	17.6

See Footnotes to Table 4.

Among the teenage unemployed at any moment in time, there are many school leavers and first-time job seekers. Since many Member countries have special policies targeted to this group, it is of some interest to know whether the share of first-time job seekers among teenage unemployment has changed in recent years (see Table 6). The share of first-time job seekers in teenage unemployment varies widely across countries, ranging from more than 50 per cent in Ireland, Italy, Portugal, the Netherlands and the United Kingdom to less than 25 per cent in Sweden, Belgium and Canada. Since 1976 the share of first-time job seekers has increased in some countries, e.g., Australia, Canada, the Netherlands, New Zealand and Portugal whereas it has fallen in France and the United States (since 1977). In the United Kingdom the share of first-time job seekers rose very sharply in 1976 but since then has remained unchanged and the share has also been very stable over the past four years in Belgium.

Thus, while the broad picture points clearly to a worsening youth unemployment situation since 1976 in most Member countries this burden has not always been equally shared by all young people. The evidence quoted above suggests that (i) teenagers have improved their position relative to young adults in some countries ; and (ii) both teenage and young adult females have generally fared worse than their male counterparts.

However, such data as the unemployment rate, average duration of unemployment, etc., are only partial indicators of the state of youth labour markets since they do not directly relate to employment experience. For example, it is perfectly possible for both youth employment and unemployment to increase over the same time period ; this only requires a sufficiently large increase in youth labour force participation. In addition, these indicators tell us nothing about the phenomenon of discouragement among young people (1) nor the degree to which underemployment is prevalent in these age groups. The joint nature of the school-work decision is an important feature of youth labour markets which also complicates the interpretation of youth employment data.

A widely-used supplement to the group-specific unemployment rate as an indicator of youth labour market performance is the employment/population ratio.(2) In order to assess what has been happening to employment population ratios in recent years, time-series of the group-specific ratios have been graphed for the same sample of 10 countries (see chart C). Looking first at the experience of the

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1) In the United States, persons aged 16-24 accounted on average for 30 per cent of all discouraged workers in 1977-79 ; that is, persons who reported themselves not in the labour force but who would like a job now and think they cannot get one. In Sweden, persons under 25 accounted for 24 per cent on average of all discouraged workers in 1977-79. Persons aged 15-24 accounted for about 20 per cent of discouraged workers in Australia in 1979. See United States Department of Labor, Employment and Earnings, January 1980 ; data supplied to the Secretariat by the Swedish authorities ; Australian Bureau of Statistics, Persons Not in the Labour Force, Australia, (including discouraged job seekers), September 1979, March 1980.

2) This indicator is much used in the United States. For example see Bowers, op.cit.

Table 6

UNEMPLOYED FIRST JOB SEEKERS(a) AGED LESS THAN 20 AS A PERCENTAGE OF ALL UNEMPLOYED PERSONS AGED LESS THAN 20

	1970	1973	1975	1976	1977	1978	1979
Australia	22.0	18.7	20.9	21.4	22.2	30.5	34.8
Belgium				19.1	18.7	18.1	19.2
Canada		19.9	10.9	10.1	10.8	11.3	12.2
France	41.5	39.8	37.1	43.0	44.1	41.4	40.1
Germany		23.6(b)	18.9	22.4	29.4	29.5	
Ireland			58.9		54.5		
Italy	86.0	88.0	86.7	88.1	59.3	65.2	66.0
Netherlands				49.8	54.9	58.4	
New Zealand				19.9	24.5	27.7	31.7
Portugal		73.9(b)	58.1	69.7	77.6	83.2	
Sweden				26.0	17.8	19.6	23.6
United Kingdom	12.5	12.7	27.6	51.3	53.1	52.6	52.4
United States	36.3	41.6	35.8	39.7	42.8	41.8	38.5

a) See country notes for different concepts. Limited information was available for the following countries : Denmark, in 1978 15.9 per cent of the unemployed aged 15-17 were seeking their first job ; Finland, in 1977 28.2 per cent of the unemployed aged 15-19 were previously students ; Japan, in 1978 27.0 of the unemployed aged 15-24 had not found jobs since graduation.
b) Data refer to 1974.

Source : National sources.

Notes

Australia : Data are for August of each year and refer to unemployed first job seekers aged 15-19 as per cent of all unemployed aged 15-19.

Belgium : The numerator refers to "chômeurs admis sur base des études" and includes only persons aged less than 25 years seeking a first job, but does not include all persons aged less than 25 seeking a first job. The denominator refers to all insured unemployed aged less than 25. Figures refer to June of each year.

Canada : Data refer to persons who never worked aged 15-24 as a per cent of all unemployed aged 15-24. 1973-78 data refer to the average for the year.

France : Data are from the March labour force surveys carried out by INSEE. For the years 1975-78, the numerator refers to the "population sans emploi à la recherche d'un emploi" or P.S.E.R.E. who have just finished their studies, the denominator refers to all P.S.E.R.E. aged 15-24. Data for 1970 and 1973 are for males only and refer to the "population disponible à la recherche d'un emploi salarié (P.D.R.E.S.) of all ages looking for a first job as a per cent of all PDRES aged 15-24. The 1975 figure according to this definition is 31.2. Data are available from the Ministry of Labour which refer to "job applicants still registered at the end of the month" and of which first job seekers aged 15-24 as a percent of all job seekers aged 15-24 for 1977-79 are 34.4, 32.4 and 33.3 respectively.

Germany : Data are for September of each year and refer to unemployed persons aged less than 20 who have had no previous employment experience as a per cent of all unemployed aged less than 20.

Ireland : Data are from the EEC labour force survey and refer to unemployed first job seekers aged 15-19 as a per cent of all unemployed aged 15-19.

Italy : Data refer to unemployed first job seekers aged 14-19 as a per cent of all unemployed aged 14-19. Data prior to 1977 are not comparable with those of later years due to revised definitions of the unemployed in the labour force survey. The figure for 1979 refers to April, all other figures are the average for the year.

Netherlands : Figures are the average of February, May, August and November and refer to registered unemployed school-leavers (in search of first employment after leaving full-time education) aged less than 19 as a per cent of all registered unemployed aged less than 19.

New Zealand : Data refer to students seeking work as per cent of all registered unemployed aged less than 21. Figures for 1976-78 refer to the average of March, June, September and December and the 1979 figure to March only.

Portugal : Data refer to unemployed persons aged 10-19 seeking a first employment as a per cent of all unemployed persons aged 10-19. Figures are for the first semester of each year.

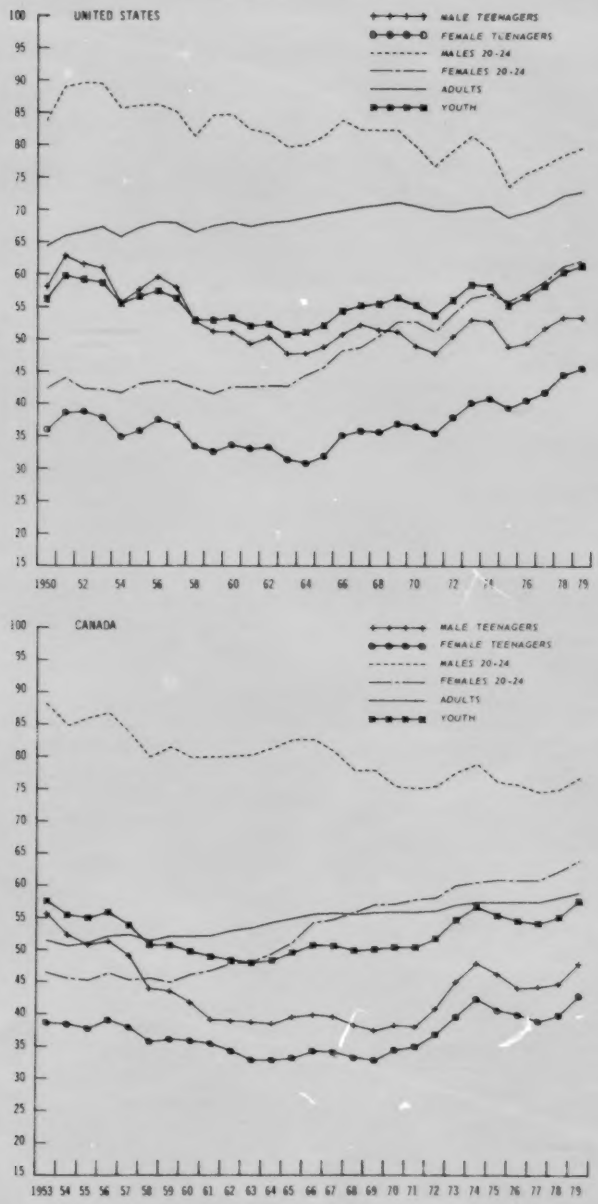
Sweden : Data refer to unemployed new entrants aged 16-19 as a per cent of all unemployed aged 16-19 for August of each year.

United Kingdom : Data are for Geat Britain only and refer to unemployed school-leavers (defined as persons who have not entered employment since terminating full-time education) aged less than 20 as a per cent of all unemployed aged less than 20. Figures are for July of each year (the average of January, April, July and October figures for 1979 is 27.2).

United States : Data refer to unemployed new entrants aged 16-19 as a per cent of all unemployed persons aged 16-19. 1970-78 figures are averages for the years, the 1979 figure is the average of the first ten months.

Chart C

AGE- AND SEX-SPECIFIC EMPLOYMENT TO POPULATION RATIOS, SELECTED COUNTRIES

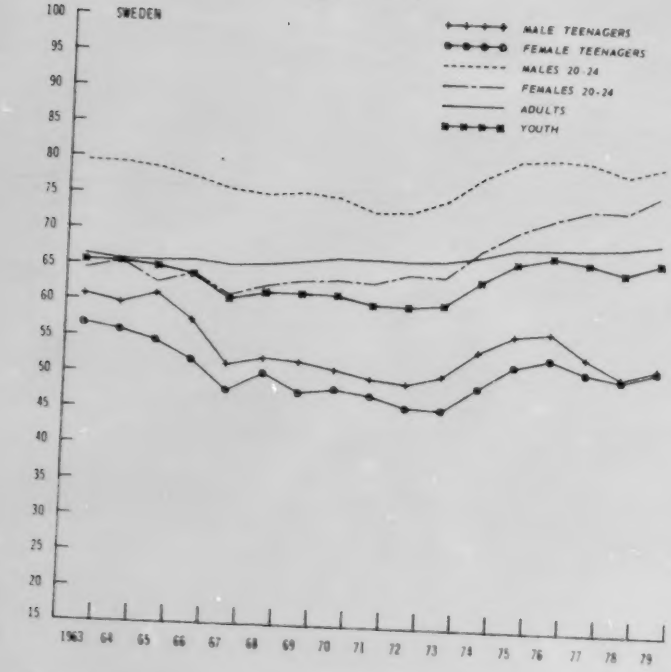


Note : Employment/population ratios have been derived using the relationship between the unemployment rate UR and the participation rate PR.

$$\text{Employment/population} = \frac{(100-UR) \times PR}{100}$$

See notes to Chart D for age cut-off of population and labour force.

Chart C (Cont'd)



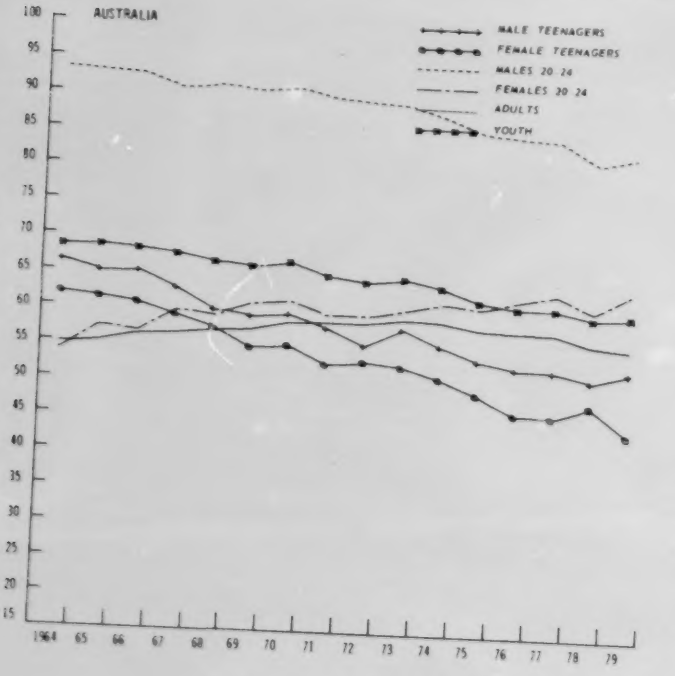
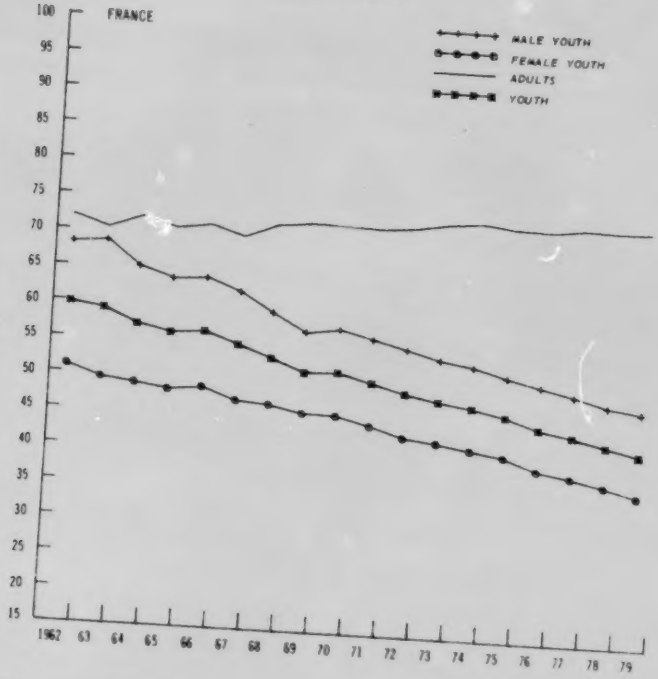
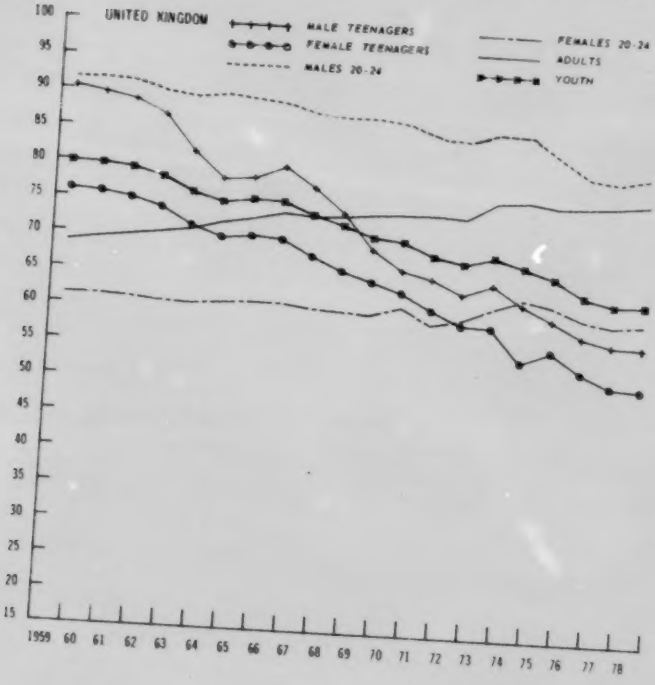


Chart C (Cont'd)





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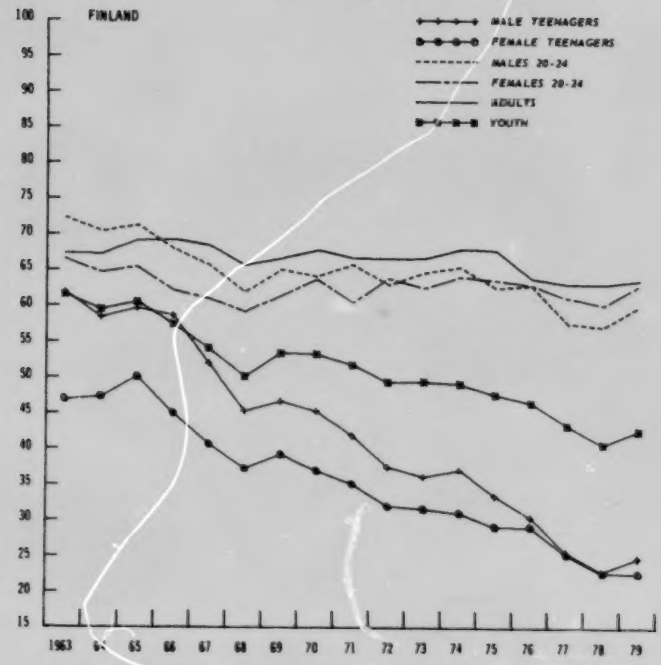


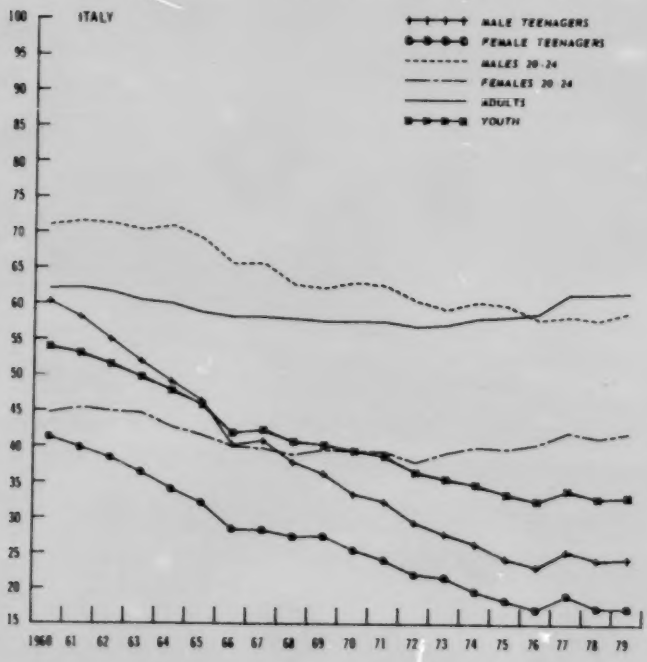
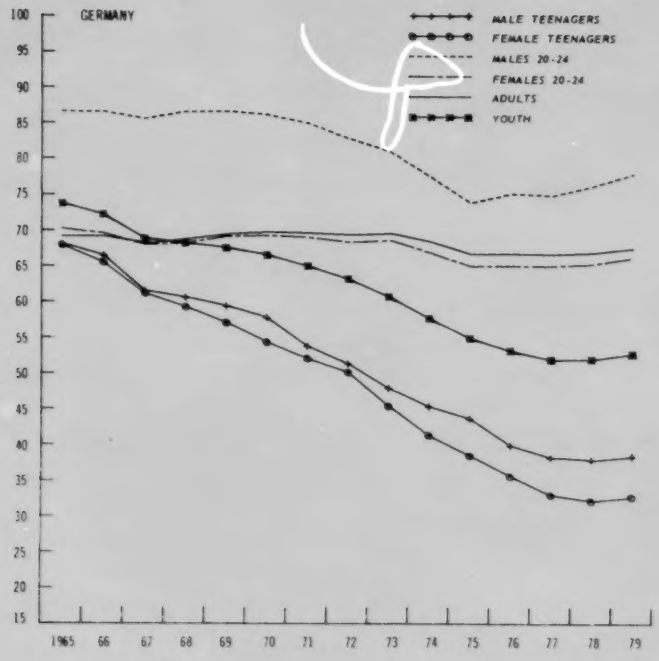
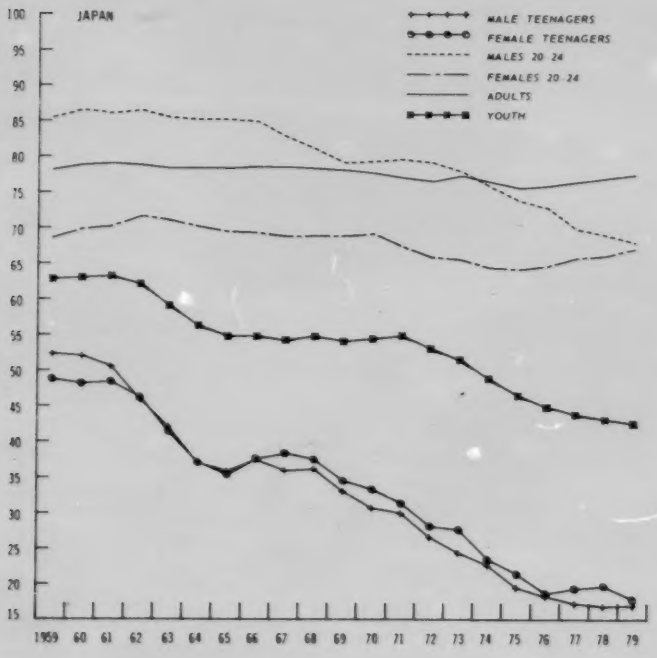


Chart C (Cont'd)





entire youth group, the overall employment/population ratio has declined in most countries. This decline is not a recent phenomenon ; it appears to reflect a longer-run trend. There are only three exceptions - Canada, Sweden and the United States. While the ratio increased in the early 1970s in Canada after being relatively stable over the previous decade, it declined in line with the downturn in economic activity during the period 1974-76 and has subsequently recovered. The ratio declined in Sweden over the period 1963 to 1973 but increased over the subsequent three years ; since then it has shown little variation, a slight decline in 1977-78 being offset by a recovery in 1979. While the ratio declined in the United States in 1974-75 under the immediate impact of the recession, it has risen sharply over the past four years. Indeed, in 1979 the level exceeded the previous post-war peak recorded in 1951. Australia is the only other country which recorded a significantly below-average decline in the ratio. It is also noticeable that the entire decline of 8 points occurred over the period 1964-75 ; since then the ratio has been very stable. In the other countries the ratio has typically declined by 15-20 points over the period up to 1979. However, in three countries - Germany, Italy and United Kingdom - the secular decline in the employment/population ratio appears to have been arrested in the immediate aftermath of the 1974-75 recession ; since then the ratio has stabilised or even increased slightly.

Examination of the group-specific ratios show, not surprisingly, that most of the decline has been concentrated among teenagers. This simply reflects the rise in full-time school enrolment rates among this age group.(1) In most countries the positive male-female differential among teenagers has tended to narrow over time. The only exceptions to this are Australia and Germany where the last few years have witnessed some growth in the male-female differential.

There are also marked differences in the trend behaviour of the employment/population ratio among males and females in the 20-24 age group. The ratio for young adult males has declined secularly in virtually every country ; even in North America the ratios are currently below the levels of the 1960s though there has been a sharp recovery since 1975 in the United States. Sweden is the only country where the ratio for young adult males is currently greater than it was in the 1960s. There appears, however, to have been some stabilization of the situation since 1976-77 in several countries, e.g., Canada, Finland, Germany and the United Kingdom. Employment/population ratios for young adult females have increased sharply in North America, Sweden and Australia whereas they have been relatively stable in the other countries. Thus, the positive male-female differential has narrowed among the 20-24 age group in almost every country. This convergence is especially noticeable in Japan and Sweden. Germany appears to be the one exception to this trend since the male-female differential has widened since the recession.

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1) Part of the explanation for the different trend in Canada, the United States and Sweden presumably lies in the fact that these countries have significantly above-average full-time school enrolment rates for teenagers. Japan is an exception since it has a very high school enrolment rate among teenagers and it also has the lowest employment/population ratio for this age group. However, the secular decline in the employment/population ratio appears to have been arrested in the mid-1970s.

In an attempt to monitor at least one aspect of the underemployment among young people, data were collected for 11 countries on the ratio of part-time to full-time employment for the relevant age groups since 1970.(1) The results (not shown) indicated a very wide variation in the ratio of part-time to full-time workers in the youth group, ranging from 5-10 per cent in Denmark, Finland, Japan, France, the Netherlands and New Zealand, to 20-30 per cent in Sweden, Norway and Canada, and 45 per cent in the United States.(2) In almost every case the ratio of part-time to full-time workers has risen since the mid-1970s, one of the most extreme examples being Norway, where the ratio has risen from 15 per cent in 1973 to 29 per cent in 1978. While the ratio of part-time working has declined slightly in the United States since 1976, it is still greater than it was in 1973 except for young adult males. There is also a fairly widespread tendency for the rise in the share of part-time working to be more heavily concentrated among females, especially teenagers.

For six countries it was also possible to collect data on the share of part-time to full-time working among the adult work force as well. A comparison of recent trends does not suggest any general tendency for part-time working to have increased more rapidly among young people than the adult work force. Only in Australia and Norway did the share of part-time work increase more rapidly among young people than adults over the period 1973-79. In Canada, France, Sweden and the United States there appeared to be no significant differences in the trends between young workers and adults.

The final labour market indicator examined is the behaviour of labour force participation rates among young people (see Chart D). The evidence on participation rates for the entire youth age group broadly points to two different patterns across Member countries since the mid-1970s. Canada and the United States are the only countries where the participation rate among young people has increased steadily since 1976. While the participation rate in Australia fell by about 3 percentage points over the ten-year period up to 1974, this decline has been completely eliminated since then. Sweden has also recorded an increase in the participation rate among young people over the last decade. However, all of this increase occurred during the period 1973-76 ; since then the rate has been relatively stable. In several countries - Germany, France, Japan and the United Kingdom - the

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1) The definition of "part-time" varies widely across countries, ranging from anyone working less than 20 hours a week in New Zealand to less than 35 hours a week in Australia and Sweden. Note that an increase in part-time work among young people is not necessarily undesirable. It can permit them to acquire some work experience while having time for education.

2) This is mainly due to the very high ratios of part-time to full-time workers among teenagers of both sexes in the United States. Many part-time workers in this age group are also full-time in school. This latter phenomenon has also become very important in recent years in Australia. Between June 1971 and August 1978 the proportions of male and female teenagers who were working part-time and attending school full-time in Australia doubled. See Robert G. Gregory and Ronald C. Duncan, "High Teenage Unemployment : The Result of Atypical Labour Supply Behaviour", Economic Record, (forthcoming).

Chart D

AGE- AND SEX-SPECIFIC PARTICIPATION RATES, SELECTED COUNTRIES

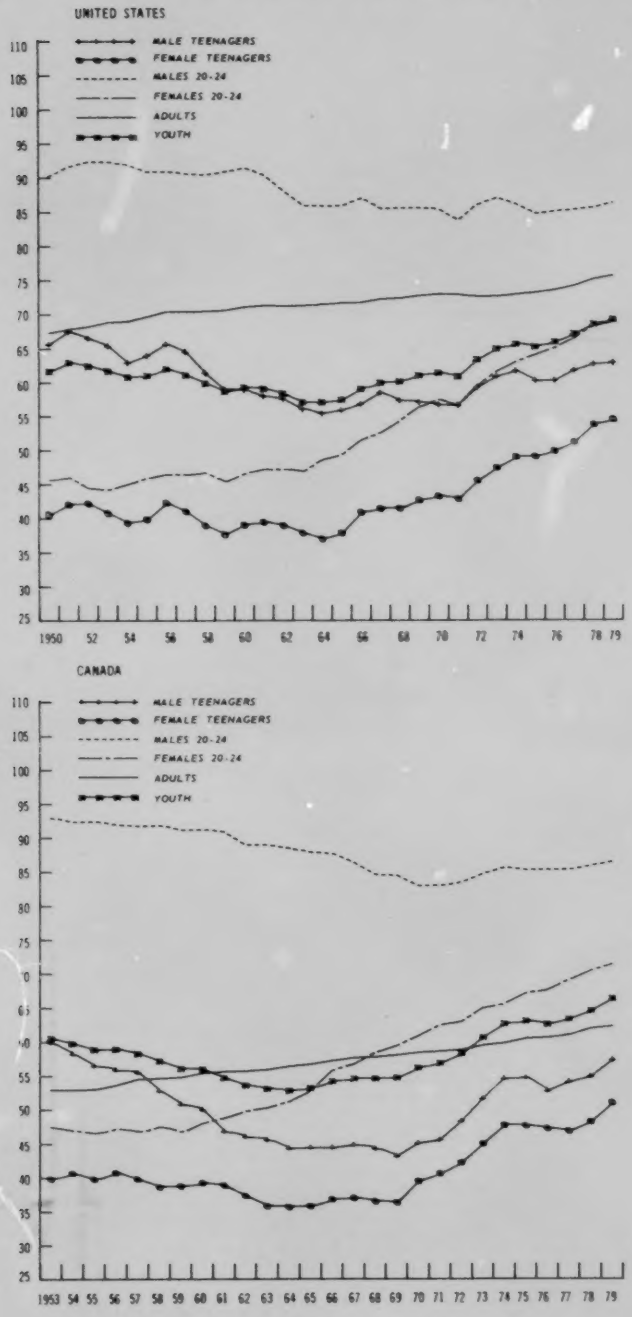


Chart D (Cont'd)

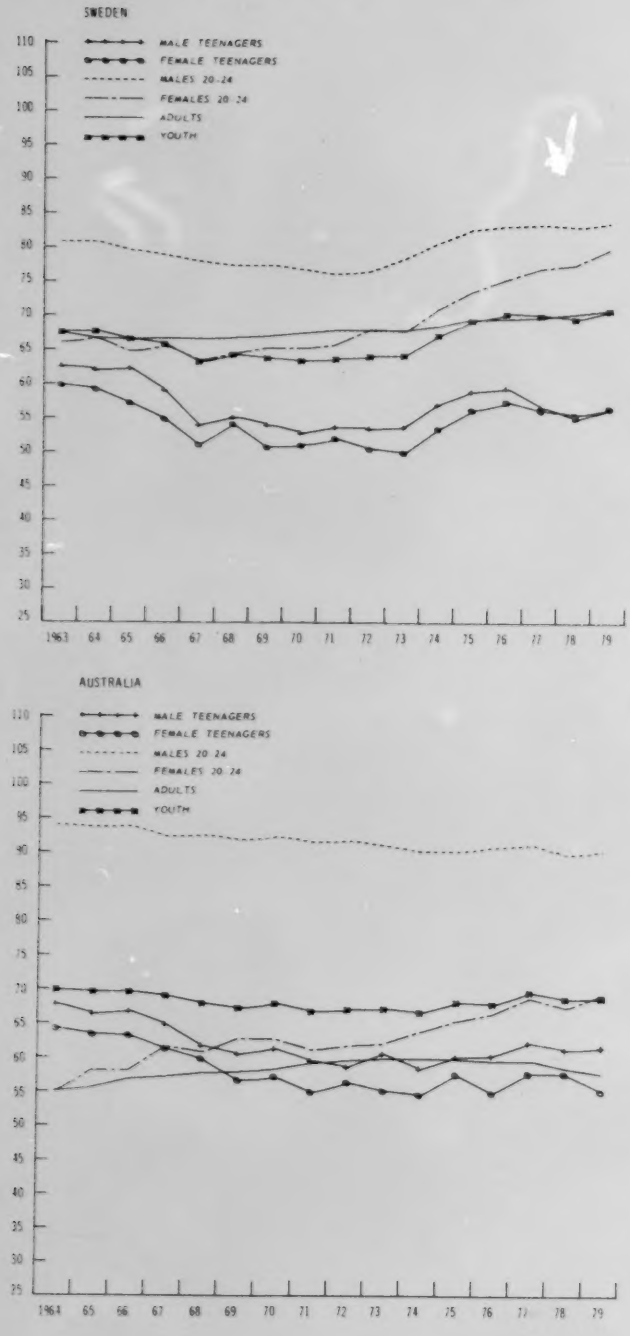
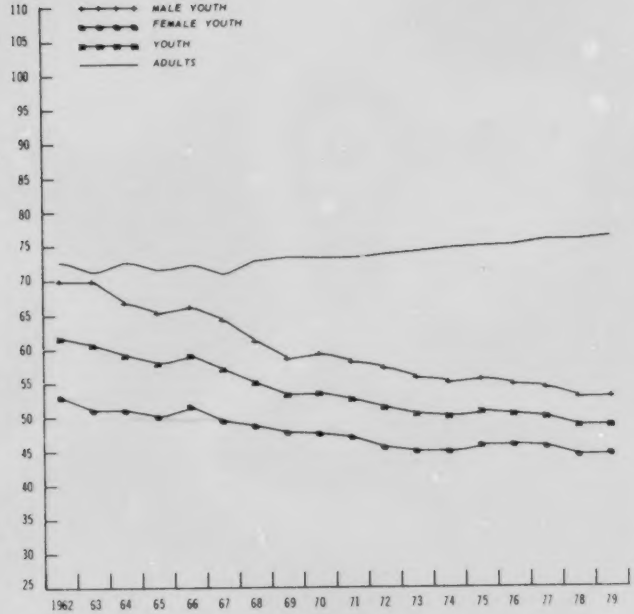


Chart D (Cont'd)

FRANCE



UNITED KINGDOM

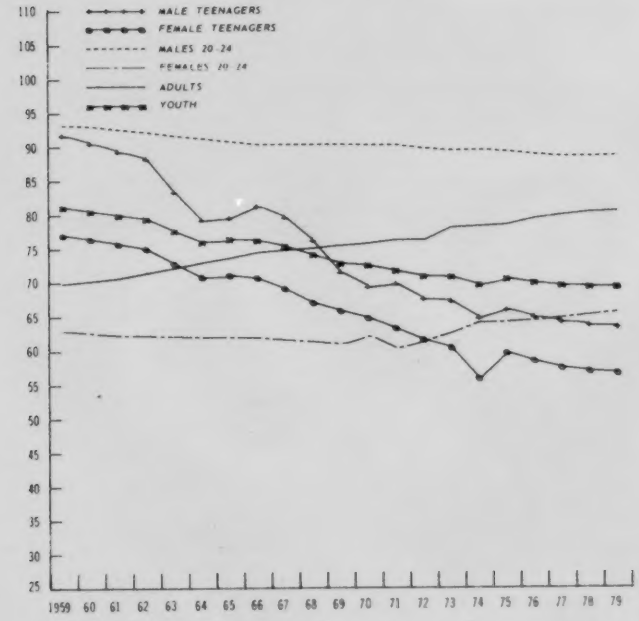
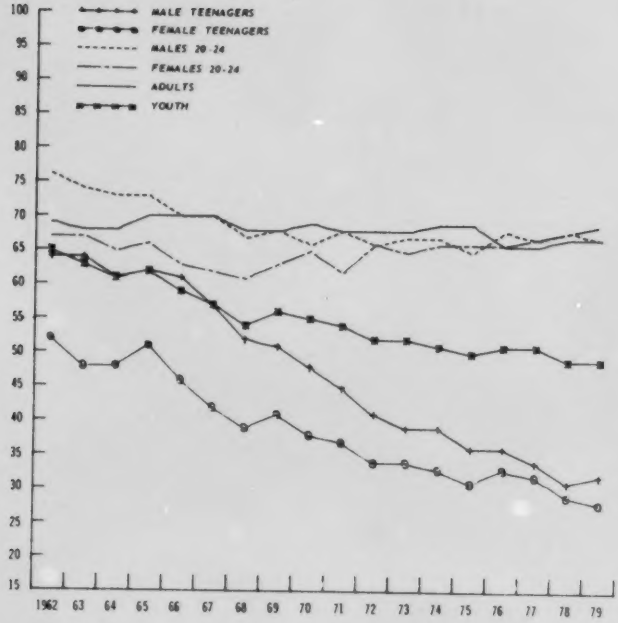


Chart D (Cont'd)

FINLAND



ITALY

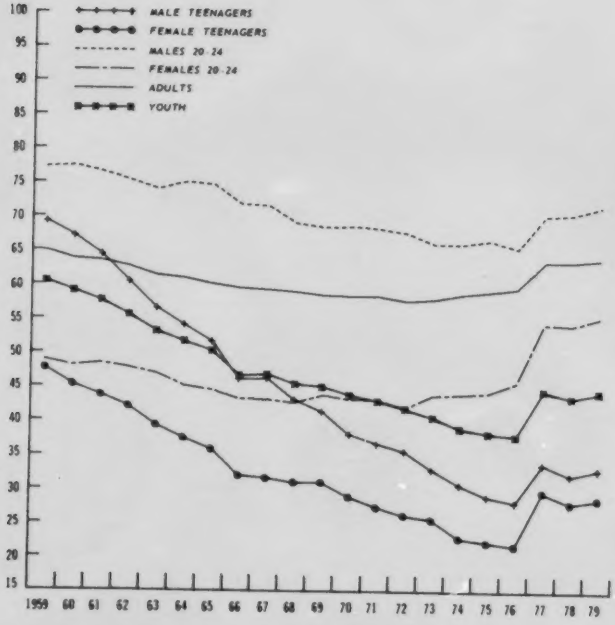
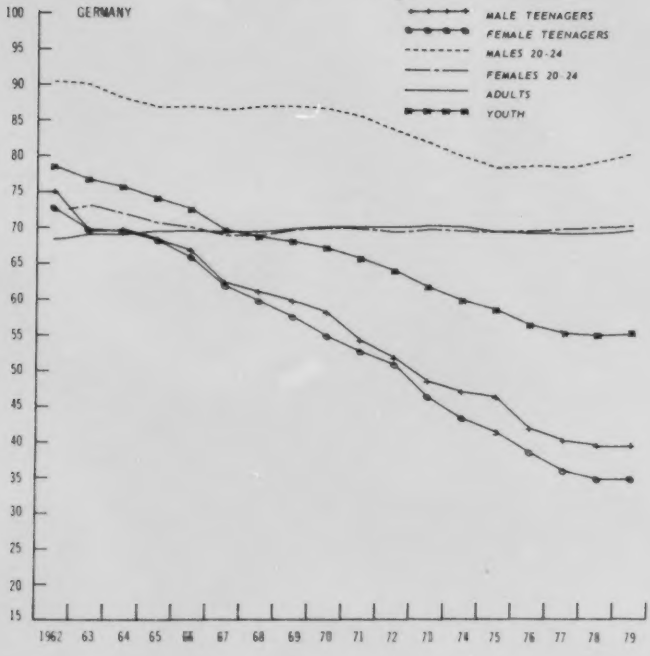
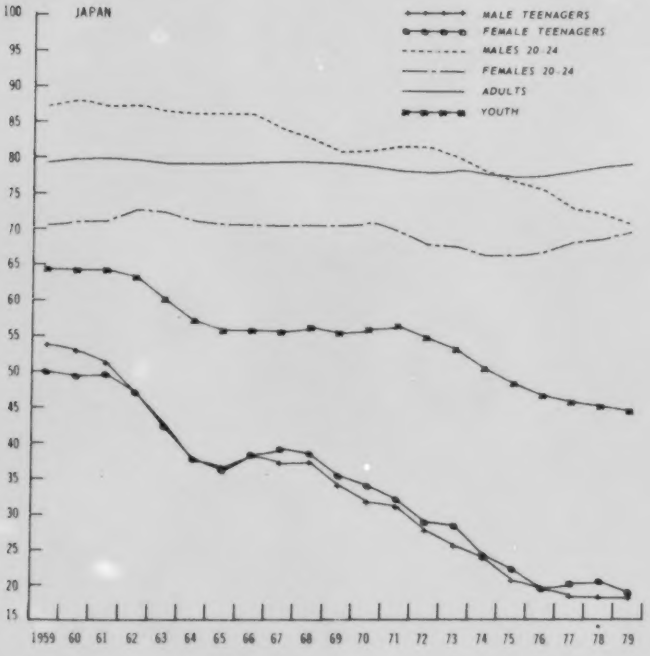


Chart D (Cont'd)





Notes to Chart D

Australia : numerator refers to the civilian labour force, the denominator refers to the civilian population. The adult rate refers to the age group 25 +.

Canada : notes as for Australia.

Finland : labour force figures exclude conscripts. The adult rate refers to the age group 25-74.

France : rates refer to ILO definitions for the years 1975-79. 1962-74 figures referring to census definitions have been adjusted by the Secretariat. For adults, labour force refers to persons aged 25 + and population to persons aged 25-64. Conscripts are excluded from the labour force.

Germany : for the adult rate, labour force refers to persons 25 and over and population to persons aged 25-64. The 1979 figures are estimates.

Italy : labour force figures exclude conscripts. The teenage rate refers to persons 14-19 and for adults, labour force refers to persons 25 and over and population to persons aged 25-64.

Japan : for the adults, labour force refers to persons aged 25-64.

Sweden : the teenage group refers to persons aged 16-19 and adults to persons 25-74.

United Kingdom : data are for Great Britain only. The teenage group refers to persons 16-19, the adult labour force 25 and over and population to 25-64 years.

United States : labour force includes armed forces and population refers to total population including armed forces overseas. The teenage rate refers to persons aged 16-19, the adult labour force to persons 25 and over and population to 25-64.

In all cases figures refer to the same month or months as for unemployment rates. See notes to Table 1.

long-term tendency for the participation rate to decline among young people appears to have been arrested over the past four years. The trends among teenagersof both sexes have generally followed the pattern of the overall participation rate among young people. The male-female differential in labour force participation among teenagers has narrowed somewhat in Canada, Sweden and the United States since 1976 whereas it appears to have widened slightly in Germany. The convergence in the male-female participation rates is even more marked among young adults (1) ; this trend is most apparent in North America, Sweden and Japan. Once again Germany is an exception since the decline in the participation rate among young adult males appears to have been halted in 1974-75 ; subsequently their participation rate has risen slightly while the participation rate among young adult females has remained virtually unchanged.

In conclusion, it appears that analysis of trends in the employment/population ratio gives a somewhat different perspective on youth employment opportunities to that presented by the group-specific unemployment rates. While the latter indicator shows a fairly general tendency for the sex differential, especially among young adults, to worsen against females, the employment/population ratios tend to point towards a narrowing of the male-female differentials since 1976.

1) Bearing in mind that the share of part-time work has risen more rapidly among young females than young males, a conversion of these activity rates into full-time equivalents would clearly show a less favourable situation for females.

III. THE MEDIUM-TERM OUTLOOK FOR YOUTH UNEMPLOYMENT

The earlier diagnosis, after considering the medium-term prospects, concluded that there would likely be a slow but steady improvement in youth labour markets after 1982 as full employment was restored and demographic pressures receded.(1) However, this assessment now appears far too optimistic when judged against both the results of Secretariat research into the potential impact of demographic changes on youth unemployment over the medium term and the current short-run economic outlook for the OECD area.

In order to make any statements about the medium-term impact of demographic forces on youth unemployment, it is first necessary to specify a model of the determinants of youth unemployment.

AN ECONOMIC-DEMOGRAPHIC MODEL OF YOUTH UNEMPLOYMENT

The basic procedure adopted by the Secretariat used regression analysis to estimate a statistical relationship on historic data linking the group-specific unemployment rates of Chart B to a limited set of exogenous variables. The estimated coefficients from such equations were then combined with projections of the demographic variables to simulate time-paths of the group-specific unemployment rates.

The basic regression equation estimated on the historic data was of the following form :

$$\ln UR_{ij} = a_0 + a_1 \ln UR^A + a_2 t + a_3 \ln POP_{ij} + \varepsilon \qquad (A)$$

where UR_{ij} = group-specific unemployment rate (i stands for sex and j for age-group) ; UR^A = adult unemployment rate ; t = a linear time trend ; POP_{ij} = population in the relevant age- and sex-specific group as a proportion of the total population of working age ; and ε = a stochastic disturbance term. (All data are transformed into logarithms.)

The admittedly very simple theoretical framework underlying equation (A) expresses movements over time in the relevant group-specific unemployment rates as

1) See OECD, Youth Unemployment, Vol. 1, op.cit., p. 28.

being determined by a set of cyclical, trend and demographic variables.(1) The cyclical variable is proxied by the adult unemployment rate though equation (A) was also estimated using the aggregate unemployment rate as the cyclical proxy. (2) Clearly the prime-age male unemployment rate would probably be a more satisfactory aggregate demand proxy in most countries. However, it was impossible to test because of the lack of sufficiently disaggregate unemployment data for some countries. The time trend was included to capture the effect of factors such as rising school participation rates and other trended variables omitted from the equation.

The population size variable was included to control for the effects of demographic shifts on youth unemployment. If, as has been widely argued, the postwar "baby boom" has contributed to the growing youth unemployment problem in recent years, then the prior expectation would be for a positive coefficient on this variable.(3) However, it is impossible to be categoric about this since an increase in cohort size implies an increase in potential labour supply which, in and of itself, need not necessarily give rise to more youth unemployment. Such an increase in potential labour supply might be expected, ceteris paribus, to lower relative youth wages and thus create an incentive for employers to substitute young workers for older workers and capital.(4) However, the existence of wage

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1) This approach to modelling the behaviour of group-specific unemployment rates is fairly common in the literature. See, for example, Kim B. Clark and Lawrence H. Summers, The Demographic Composition of Cyclical Variations in Employment. U.S. Department of Labor Technical Analysis Paper No. 61, January 1979 ; Martin Feldstein and Brian Wright, "High Unemployment Groups in Tight Labor Markets", Harvard Institute of Economic Research Discussion Paper No. 488, 1976 ; and Makeham, Youth Unemployment..., op. cit.. For a much more complete demographic model of the labour force which, however, rests on essentially the same set of exogenous variables see Ralph E. Smith, "A Simulation Model of the Demographic Composition of Employment, Unemployment, and Labor Force Participation", in Ronald G. Ehrenberg (ed.), Research in Labor Economics. Vol. I, Greenwich : JAI Press, 1977.

2) Clark and Summers (op. cit.) use the prime-age male unemployment rate as an aggregate demand proxy while Makeham (op. cit.) uses the male and female unemployment rates. However, using the total unemployment rate will lead to some bias in the estimates since the total unemployment rate is simply the weighted average of the individual group-specific unemployment rates. See Makeham (p.25) for some discussion of the bias imparted by this factor.

3) For example, Seninger has argued that the baby boom was a major factor underlying youth labour market problems in the United States in recent years. See Stephen F. Seninger, "Postwar Trends in Youth Unemployment", in Arvil V. Adams and Garth L. Mangum (eds.), The Lingering Crisis of Youth Unemployment. Kalamazoo, Mich., Upjohn Institute for Employment Research, 1978.

4) Since the empirical evidence clearly shows that younger and older workers are imperfect substitutes in production, the impact of changes in the relative numbers of workers of different ages on relative wages will depend crucially on the degree of substitutability (complementarity) between capital and young and older workers. The empirical evidence suggests that skilled labour and capital are complements while capital and unskilled labour are substitutes in production. Since older workers tend to be more skilled than younger workers, this suggests that the extent of substitution of younger for older workers in response to a fall in relative wages is likely to be small. Indeed, in youth-intensive sectors, the main channel of substitution will probably be between young workers and capital rather than between young and older workers. For a good discussion of these issues see Richard B. Freeman, "The Effect of Demographic Factors on Age-Earnings Profiles", Journal of Human Resources, Fall 1979.

rigidities in the labour market - for example, as a result of minimum wage legislation, collective bargaining agreements or customary wage differentials - may prevent the necessary adjustments in relative wages from being fully realised. In that event a growing cohort size would be associated with some increase in unemployment among young people. It would have been desirable in principle to have included relative wages as one of the independent variables in equation (A). However, this was not possible due to lack of time-series data on earnings by age for a large sample of countries.

One additional shortcoming of this simple model is that it takes no account of the choice which young people have to make between schooling and labour force participation. The school-work decision is a very complicated issue and, as pointed out in Section II, the classification is becoming more blurred in recent years due to the growth of part-time working among young people while still at school or in higher education. Nevertheless, this decision is bound to be indirectly influenced by demographic trends as well as by cyclical conditions and relative wages. Equation (A) can thus best be regarded as a reduced-form relationship from a more complex model ; the estimated coefficients are best interpreted as representing the net outcome of the underlying supply and demand forces.

The equations were estimated using annual data in all cases by ordinary least squares (OLS).(1) The regression results for the ten countries in question are presented in Tables 7 to 16. In the case of Italy a zero-one dummy variable was added to the equations as an ad hoc factor to take account of the significant change to the definitions and classifications of the quarterly labour force survey in 1977. Finally, inspection of the residuals from some preliminary regressions for the United Kingdom suggested that the special programmes had some influence in lowering youth unemployment rates, especially for teenagers, since 1976.(2) In order to make some adjustment for this a dummy variable was added to the regressions for teenagers as well as the overall youth unemployment rate.(3)

Judged by the conventional statistical criteria, the fit of this simple model to the historic data is very satisfactory. Perhaps the only partial exceptions are the equations for female teenagers in Japan and young adult females in Sweden where only two-thirds of the residual variance are explained by the model.

The performance of the individual regression coefficients is rather variable. The aggregate demand proxy dominates the other regressors ; in every single case it is significant at the 5 per cent level or better with the expected positive coefficient. The typical response elasticity of the global youth unemployment rate with

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1) In a few cases where both the Durbin-Watson statistics indicated the presence of serial correlation in the residuals and the sample size was large enough to promise some improvement in the efficiency of the estimates, the OLS results were re-estimated using the Cochrane-Orcutt iterative process.

2) The first such programme which was especially geared to young people - the Job Creation Programme - was launched at the end of 1975. Subsequently several other schemes targeted to young people were introduced, culminating in the Youth Opportunities Programme which came into operation early in 1978.

3) In order to take some account of the varying intensity of these programmes, the dummy variable was graded as follows : 0(1959-75), 0.5(1976-77) and 1(1978-79).

Table 7

REGRESSION RESULTS FOR GROUP-SPECIFIC UNEMPLOYMENT RATES, AUSTRALIA 1964-79

Equation No.	Dependent Variables	CONST	UR^A	TT	POP	$\bar{R}^2$	S.E.E.	D.W.
1	M(15-19)	-0.893 (0.16)	1.127 (4.73)	0.041 (1.31)	0.513 (0.20)	0.96	0.15	1.53
2	F(15-19)	10.063 (0.75)	1.339 (4.54)	-0.014 (0.31)	-4.418 (0.67)	0.92	0.20	1.42
3	M(20-24)	0.775 (0.73)	1.014 (6.53)	0.069 (3.53)	-1.051 (1.49)	0.99	0.09	2.42
4	F(20-24)	1.586 (1.52)	1.235 (7.16)	-0.019 (0.89)	-0.258 (0.37)	0.96	0.11	2.77
5	Y(15-24)	17.509 (4.73)	1.037 (9.37)	0.040 (3.13)	-5.320 (4.57)	0.99	0.08	2.20

Notes : 1. The symbols M, F and Y refer to the male, female and total youth cohort unemployment rate, respectively.

2. t-ratios are shown in parentheses.

3. Symbols are as follows : UR^A = adult unemployment rate : TT = time trend ; POP = share of relevant youth cohort in population of working age ; $\bar{R}^2$ = squared coefficient of determination (adjusted for degrees of freedom) ; S.E.E. = standard error of estimate ; D.W. = Durbin-Watson statistic ; and RHO = Cochrane-Orcutt autoregressive coefficient.

Table 8

REGRESSION RESULTS FOR GROUP-SPECIFIC UNEMPLOYMENT RATES, CANADA 1953-79

Equation No.	Dependent Variables	CONST	UR^A	TT	POP	$\bar{R}^2$	S.E.E.	D.W.	RHO
1	M(15-19)	-0.244 (0.92)	0.853 (16.68)	-0.005 (1.22)	1.009 (3.21)	0.92	0.04	1.47	0.652 (3.07)
2	F(15-19)	-1.951 (2.99)	0.814 (10.70)	0.030 (6.24)	1.242 (3.67)	0.97	0.08	1.37	
3	M(20-24)	0.130 (0.45)	1.110 (32.96)	-0.002 (1.06)	0.248 (1.53)	0.98	0.04	1.68	
4	F(20-24)	-4.038 (5.45)	1.026 (12.47)	0.032 (6.24)	1.902 (4.56)	0.97	0.09	1.28	
5	Y(15-24)	-2.205 (2.34)	0.962 (25.31)	0.006 (1.58)	0.884 (3.02)	0.99	0.03	1.47	

Table 9

REGRESSION RESULTS FOR GROUP-SPECIFIC UNEMPLOYMENT RATES, FINLAND 1963-79

Equation No.	Dependent Variables	CONST	UR^A	TT	POP	$\bar{R}^2$	S.E.E.	D.W.
1	M(15-19)	1.039 (0.33)	1.123 (13.89)	0.016 (0.53)	-0.047 (0.04)	0.97	0.11	1.92
2	F(15-19)	-0.337 (0.30)	0.558 (3.69)	0.117 (7.14)	-0.518 (0.83)	0.94	0.21	2.03
3	M(20-24)	-2.571 (0.50)	1.303 (10.04)	0.010 (0.21)	1.538 (0.71)	0.92	0.18	1.84
4	F(20-24)	-3.802 (3.29)	0.623 (4.23)	0.104 (6.53)	1.084 (1.66)	0.94	0.21	2.42
5	Y(15-24)	2.481 (1.08)	0.978 (13.51)	0.022 (2.43)	-0.624 (0.95)	0.97	0.10	1.78

Table 10

REGRESSION RESULTS FOR GROUP-SPECIFIC UNEMPLOYMENT RATES, FRANCE 1962-79

Equation No.	Dependent Variables	CONST	UR^A	POP	$\bar{R}^2$	S.E.E.	D.W.
1	M(15-24)	4.156 (1.95)	0.954 (9.47)	-1.325 (1.57)	0.85	0.20	1.12
2	F(15-24)	4.624 (2.08)	1.148 (10.01)	-1.356 (1.50)	0.87	0.21	1.16
3	Y(15-24)	5.191 (1.95)	1.065 (10.38)	-1.298 (1.55)	0.88	0.20	1.08

Notes : The unemployment rates are measured according to ILO definitions. Actual figures are available for 1975-79 and the Secretariat adjusted the series "au sens du recensement" for the years 1962-74 to make them comparable. Regressions on the series "au sens du recensement" for the whole period produced almost identical results. Conscripts are included in the denominator.

REGRESSION RESULTS FOR GROUP-SPECIFIC UNEMPLOYMENT RATES, FRANCE 1968-79

Equation No.	Dependent Variables	CONST	UR^A	POP	$\bar{R}^2$	S.E.E.	D.W.
1	M(15-17)	10.083 (1.10)	0.956 (3.15)	-6.352 (0.97)	0.81	0.27	1.99
2	F(15-17)	16.826 (4.80)	1.001 (8.12)	-11.016 (4.31)	0.98	0.11	1.66
3	M(18-24)	3.193 (2.04)	1.062 (21.12)	-1.111 (1.59)	0.98	0.07	2.67
4	F(18-24)	-1.082 (0.35)	1.393 (14.20)	0.911 (0.64)	0.95	0.14	2.24
5	Y(15-24)	3.587 (0.69)	1.214 (14.29)	-0.906 (0.53)	0.97	0.10	1.84

For the period 1968-74 rates refer to census definition and for 1975-79 to ILO definitions. Conscripts are not included in the denominator.

Table 11

REGRESSION RESULTS FOR GROUP-SPECIFIC UNEMPLOYMENT RATES, GERMANY 1965-79

Equation No.	Dependent Variables	CONST	UR^A	POP	$\bar{R}^2$	S.E.E.	D.W.
1	M(15-19)	-1.091 (0.33)	1.516 (7.49)	0.454 (0.23)	0.94	0.34	0.92
2	F(15-19)	-12.886 (4.03)	0.830 (4.21)	7.886 (4.09)	0.94	0.34	0.67
3	M(20-24)	-3.498 (1.85)	1.570 (16.83)	1.864 (1.63)	0.97	0.26	1.01
4	F(20-24)	-3.774 (1.51)	1.168 (10.10)	2.532 (1.64)	0.93	0.30	0.56
5	Y(15-24)	-15.455 (2.99)	1.169 (8.91)	5.057 (2.99)	0.96	0.27	0.44

Table 12

REGRESSION RESULTS FOR GROUP-SPECIFIC UNEMPLOYMENT RATES, ITALY 1960-79

Equation No.	Dependent Variables	CONST	UR^A	TT	POP	DUM	$\bar{R}^2$	S.E.E.	D.W.
1	M(14-19)	3.166 (2.43)	0.434 (4.11)	0.051 (11.44)	-0.978 (1.45)	-0.027 (0.22)	0.96	0.07	2.30
2	F(14-19)	-0.173 (0.15)	0.409 (3.92)	0.064 (12.82)	0.626 (1.04)	0.211 (1.70)	0.98	0.07	1.72
3	M(20-24)	-1.524 (2.04)	0.817 (8.48)	0.061 (14.26)	1.231 (2.90)	-0.356 (3.44)	0.97	0.07	2.01
4	F(20-24)	-2.716 (3.54)	0.698 (7.04)	0.072 (14.74)	1.831 (4.44)	-0.083 (0.75)	0.98	0.06	1.59
5	Y(14-24)	0.461 (0.11)	0.538 (5.71)	0.053 (8.19)	0.168 (0.13)	0.010 (0.07)	0.98	0.06	1.77

DUM is a dummy variable taking values 0 for 1960-76 and 1 for 1977-79.

Table 13

REGRESSION RESULTS FOR GROUP-SPECIFIC UNEMPLOYMENT RATES, JAPAN 1959-79

Equation No.	Dependent Variables	CONST	UR^A	TT	POP	$\bar{R}^2$	S.E.E.	D.W.
1	M(15-19)	-0.238 (0.16)	0.763 (2.98)	0.056 (3.14)	0.003 (0.00)	0.84	0.24	2.15
2	F(15-19)	1.093 (0.95)	0.612 (3.35)	-0.000 (0.03)	-0.283 (0.57)	0.66	0.18	1.96
3	M(20-24)	-3.309 (3.60)	1.482 (6.78)	0.026 (2.90)	1.700 (3.41)	0.91	0.16	1.79
4	F(20-24)	-2.417 (2.63)	1.008 (5.12)	0.026 (3.14)	1.314 (2.75)	0.85	0.15	2.37
5	Y(15-24)	-1.386 (0.73)	0.769 (4.57)	0.035 (4.46)	0.396 (0.72)	0.92	0.12	1.48

Table 14

REGRESSION RESULTS FOR GROUP-SPECIFIC UNEMPLOYMENT RATES, SWEDEN 1963-79

Equation No.	Dependent Variables	CONST	UR^A	TT	POP	$\bar{R}^2$	S.E.E.	D.W.
1	M(16-19)	-2.313 (1.19)	1.293 (8.15)	0.062 (3.71)	1.302 (1.27)	0.91	0.12	2.40
2	F(16-19)	0.494 (0.38)	0.552 (5.29)	0.035 (3.04)	0.288 (0.41)	0.88	0.08	1.63
3	M(20-24)	0.642 (0.89)	1.344 (11.10)	0.036 (6.20)	-0.568 (1.52)	0.94	0.10	2.04
4	F(20-24)	-0.076 (0.06)	0.558 (2.75)	0.035 (3.65)	0.163 (0.25)	0.65	0.16	2.50
5	Y(16-24)	4.530 (2.23)	0.955 (11.67)	0.016 (2.03)	-1.277 (2.05)	0.94	0.07	1.93

Table 15

REGRESSION RESULTS FOR GROUP-SPECIFIC UNEMPLOYMENT RATES, UNITED KINGDOM 1959-79

Equation No.	Dependent Variables	CONST	UR^A	TT	POP	DUM	$\bar{R}^2$	S.E.E.	D.W.	RHO
1	M(16-19)	-3.435 (2.76)	1.695 (8.07)	0.042 (2.73)	1.683 (1.92)	-0.626 (3.44)	0.97	0.16	1.68	
2	F(16-19)	-2.300 (3.30)	1.679 (11.89)	0.027 (1.62)	2.975 (2.79)	-0.160 (0.85)	0.95	0.12	1.65	0.575 (3.90)
3	M(20-24)	-1.009 (1.46)	1.457 (14.40)	0.017 (2.10)	0.423 (0.96)		0.98	0.10	1.39	
4	F(20-24)	0.326 (1.25)	1.265 (10.53)	0.099 (2.37)	-3.346 (3.00)		0.89	0.11	1.19	0.892 (26.82)
5	Y(16-24)	-6.441 (2.70)	1.486 (12.52)	0.023 (1.93)	1.955 (2.33)	-0.046 (0.44)	0.98	0.11	1.52	

Notes : The youth unemployment data refer to the month of July and exclude school-leavers and adult students.
DUM is a dummy variable taking values 0 for 1959-75, 0.5 for 1976-77 and 1 for 1978-79.

Table 16

REGRESSION RESULTS FOR GROUP-SPECIFIC UNEMPLOYMENT RATES, UNITED STATES 1950-79

Equation No.	Dependent Variables	CONST	UR^A	TT	POP	$\bar{R}^2$	S.E.E.	D.W.	RHO
1	M(16-19)	-0.126 (0.44)	0.680 (16.20)	0.001 (0.38)	1.020 (5.54)	0.95	0.06	1.87	
2	F(16-19)	-0.192 (0.91)	0.496 (10.38)	-0.001 (0.20)	1.429 (4.99)	0.88	0.06	1.92	0.503 (3.04)
3	M(20-24)	-0.107 (0.18)	1.223 (15.87)	0.015 (2.94)	0.073 (0.22)	0.93	0.11	1.40	
4	F(20-24)	0.566 (1.63)	0.667 (12.45)	0.020 (3.16)	-0.135 (0.33)	0.91	0.06	1.70	0.490 (2.83)
5	Y(16-24)	-0.426 (0.65)	0.776 (13.28)	0.009 (0.94)	0.689 (1.21)	0.89	0.07	1.71	0.607 (3.98)

respect to the adult unemployment rate appears to be unity, i.e., a one per cent rise in the adult rate is typically accompanied by a similar increase in the rate of youth unemployment. However, the regression results reveal a wide degree of variability in the magnitude of this elasticity across countries, ranging from a low of 0.5 for Italy to a high of 1.5 for the United Kingdom. There is also a great deal of intra-country variation in the magnitude of this aggregate demand effect at the level of the individual group-specific unemployment rates.

There appear to be two clear patterns across countries. First, the elasticity is almost invariably larger for males than for females in both age groups, Australia and France being the sole exceptions. Thus, the unemployment rate for young males appears to be more cyclically sensitive than the rate for young females. Second, the cyclical sensitivity is generally significantly less for teenagers than for young adults. Australia and the United Kingdom are the only two countries where the elasticities for teenagers of both sexes are greater than they are for young adults.

The explanatory power of the demographic variable is patchy. It is totally insignificant in almost all the group-specific regressions for Australia, Finland, France and Sweden. However, it is significant with a positive coefficient in the regressions on the total youth unemployment rate for Canada, Germany and the United Kingdom though the variable is not uniformly significant for all group-specific rates. The demographic variable is also significant in the Italian and Japanese regressions for young adults of both sexes and in the case of teenagers in the United States. Thus, there is some statistical evidence to support the hypothesis of a "baby boom" effect on youth unemployment rates in recent years. There are negative and sometimes significant coefficients on the demographic variable in a number of the equations, e.g., the regressions on the total youth unemployment rate for Australia and Sweden. As pointed out above, the negative coefficients may partly reflect the influence of relative wage effects consequent on a change in the age structure of the working population.(1) In cases where this relative wage effect is strong the population variable may simply be acting as a proxy for it in the regression equation.

The trend variable appears generally to be more significant than the demographic variable. It is significant at the 5 per cent level or better in 26 out of the 40 cross-country regressions in which it is included.(2) Thus, there appears to be a fairly general tendency for youth unemployment to increase purely

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1) Recent research in the United States has shown that the arrival of the post-World War II baby boom cohorts produced a rapid decline in the average age of the labour force. This shift in the age distribution lowered the relative wages of new entrants. See Finis Welch "Effects of Cohort Size on Earnings : The Baby Boom Babies' Financial Bust", Journal of Political Economy, October (Supplement), 1979. See also Richard B. Freeman, "The Effect of Demographic Factors on Age-Earnings Profiles", op. cit., who shows that the change in the age-earnings profile has been especially marked for young males.

2) The time trend was excluded for the final set of equations for France and Germany. In the former case it was always insignificant while in the latter it gave rise to implausible time-paths of youth unemployment rates during some simulations.

as a function of time. This effect is especially noticeable in Finland, Italy, Japan, Sweden and the United Kingdom. In the remaining countries (excluding France and Germany) there are also significant trend effects over and above the influences of the cyclical and demographic variables at the level of individual group-specific unemployment rates, e.g., young adults of both sexes (United States), teenage and young adult females (Canada), young adult males and the overall youth unemployment rate (Australia).

Thus, the significance of the trend factor points clearly to a secular weakening in the competitive position of young people vis-à-vis older workers in the labour market.(1) Unfortunately, this simple reduced-form model can only highlight this fact ; it does not permit one to isolate the underlying causes of this trend deterioration.(2)

It is worth noting that the dummy variable approach suggests that the special programmes in the United Kingdom have significantly lowered the unemployment rate of male teenagers over the past three years.(3) The evidence for a favourable impact of the programmes on teenage females is very weak. While the dummy variable also has a negative coefficient in the regression for teenage females, it is insignificant.

PROJECTIONS OF YOUTH UNEMPLOYMENT FOR 1980-81

These estimated relationships were used to project youth unemployment rates for the seven largest Member countries over the next two years. OECD forecasts of total unemployment rates to mid-1981 were used and projections of the relevant

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1) It is easy to show that the regression results in Tables 7 to 16 can be interpreted in terms of movements in the ratio of youth to adult unemployment rates. Equation (A) can be rewritten as :

$$\frac{UR_{ij}}{UR^A} = \Pi e^{a_2 t} (POP_{ij})^{a_3} (UR^A)^{a_1} \varepsilon^{-1} \qquad (B)$$

where $\Pi = e^{a_0}$.

Equation (B) expresses the ratio of the youth to adult unemployment rate as a function of cyclical, demographic and trend factors. Note that in this case the time trend is exponential.

2) A variant of equation (A) was also tested including a term in time squared to capture any possible non-linearities in the relationship. The results (not shown) generally provided no support for the quadratic version of equation (A). The only exceptions were the estimated equations for both Germany and the United States. In both cases the coefficient on time squared was significant in all the group-specific regressions except young adult males in the United States. The coefficient was always negative, indicating a clear tendency for the secular deterioration in the ratio of youth to adult unemployment rates to slow down in recent years.

3) The dummy variable added to the Italian regressions as an ad hoc adjustment for the change in labour force survey definitions appears to have no significant influence except in the regression for young adult males where it has a negative coefficient. It is possible that this negative effect may be partly capturing the impact of special programmes to cope with youth unemployment introduced in 1977 under law 285.

group-specific population shares were compiled from national sources.(1) Forecasts of youth unemployment for 1981 were derived on the basis that the total unemployment forecasts for the first half of the year applied over the whole year. This means that the forecasts of youth unemployment for 1981 are especially tentative. The results are shown in Table 17.

Table 17

FORECASTS OF YOUTH UNEMPLOYMENT 1980-81

	Actual		Forecasts	
	1978	1979	1980	1981
United States	11.7	11.2	14	16
Japan	3.8	3.7	3¾	4
Germany (a)	4.8	3.8	4¼	5½
France	11.0	13.3	15	17
United Kingdom (a) (b)	8.9	8.0	10¾	14
Italy	24.8	25.6	28½	31
Canada	14.3	13.0	13¾	14¼
Total of above countries	10.8	10.5	12½	14¼

a) The projected youth unemployment rates for both Germany and the United Kingdom have been adjusted downwards by about 1/2 of a percentage point. This rough adjustment is necessitated by the observed pattern of the residuals since 1977 in both cases.

b) The youth unemployment data exclude school-leavers and adult students.

The forecasts suggest a sharp rise in youth unemployment everywhere over the next year or so, except in Canada and Japan. The most severe deterioration is forecast for the United Kingdom, where the youth unemployment rate by 1981 is expected to be 75 per cent above its level in 1979. Youth unemployment rates in Germany and the United States are forecast to be over 40 per cent higher by 1981 compared with increases of 28 per cent for France and 21 per cent for Italy. In both the United Kingdom and Germany the forecast deterioration reflects not only the depressed path of forecast aggregate demand but also continued growth in the youth share of the working-age population. In Canada and Japan, however, the numbers of young people reaching working age are now declining and this is a factor moderating the forecast rise in youth unemployment.

THE IMPACT OF DEMOGRAPHIC CHANGES OVER THE MEDIUM TERM

The econometric results show that a growing youth share in the population of

1) Since only forecasts of total unemployment are available, the regression equations with total unemployment as the cyclical proxy rather than adult unemployment were used. For details of the forecasts see OECD Economic Outlook, No. 27, July, 1980. The forecasts of youth unemployment were also prepared in July 1980.

working age has been positively associated with increased youth unemployment in some countries. Since there will be significant changes in the age structure of the population in many OECD countries over the next decade, it is important to assess the likely impact of this factor on youth unemployment.

To this end the most recent demographic projections were combined with the regression model to produce a series of simulations. In all cases where the demographic variable was a significant factor in explaining past movements in youth unemployment, the equations were used to simulate the impact of the projected demographic shifts up to 1985.

However, there is one drawback with this approach. The regression model used to estimate the effects of past demographic shifts on youth unemployment may not be a very reliable guide to its potential future impact in certain countries. The reason is that in some countries (e.g., Australia, Finland and Sweden) the relative size of the youth age group did not vary much over the estimation period. In such circumstances econometric methods cannot attach much significance to demographic factors on the basis of historical evidence. Nevertheless, if the youth share of the working-age population is projected to change significantly in these countries over the next decade, one would expect this to have an impact on youth unemployment. This is an important caveat which needs to be borne in mind when assessing the results of the simulations.

In order to isolate the role of the demographic and trend effects from the cyclical effect, the adult unemployment rate was fixed at its 1979 level in all the simulations. Thus, the assumptions about the exogenous variables underlying the simulations are as follows : (i) there is no change in aggregate demand over the period ; (ii) the share of young people in the working-age population over the period up to 1985 changes in line with the most recent national projections ; and (iii) the secular deterioration in youth unemployment continues at the same rate as observed in the past.

The demographic variable was significant at the 5 per cent level in the regressions on the overall youth unemployment rate for Canada, Germany and the United Kingdom. The simulation results for these countries and also the United States, where the demographic variable was significant at the 20 per cent level, are as follows :

SIMULATED DEMOGRAPHIC AND TREND EFFECTS ON YOUTH UNEMPLOYMENT RATES

	Actual rates	Simulated Values					
	1979	1980	1981	1982	1983	1984	1985
Canada	13.0	13.0	12.9	12.7	12.4	12.2	11.9
Germany	3.9	4.8	5.0	5.1	4.9	4.8	4.6
United Kingdom	8.0	8.7	9.1	9.5	9.7	9.9	10.2
United States	11.2	11.9	11.9	11.8	11.7	11.5	11.4

The simulations show that the significant decline in the youth share of the working-age population in Canada - which is projected to fall from 30 per cent in

the mid-1970s to about 25 per cent by 1985 - does outweigh the secular tendency for the youth unemployment rate to increase. The overall youth unemployment rate declines steadily over the period and by 1985 it is almost 10 per cent below its actual 1979 level. In the United Kingdom, on the other hand, the share of the youth age group is projected to increase from 21 per cent in the mid-1970s to 23 per cent by 1985. This continued growth in the youth population combines with the negative trend to produce a growing time-path of youth unemployment so that by 1985 the simulation shows the youth unemployment rate to be over 20 per cent higher than in 1979.(1) The youth population in Germany is projected to increase until 1982 and thereafter it begins to decline. The simulation reflects this time-path as it shows youth unemployment rising steadily over the first three years but from 1982 on the rate begins to turn down again. In the United States the population share has been declining since 1975-77 when it peaked at 27 per cent and it is projected to fall to about 23 per cent by 1985. The simulation shows that this population decline just offsets the continued trend deterioration after 1981 so that by 1985 the youth unemployment rate is almost back to its 1979 level.

The simulations also show more significant demographic effects for some individual group-specific unemployment rates, especially for teenagers.

SIMULATED DEMOGRAPHIC AND TREND EFFECTS ON TEENAGE UNEMPLOYMENT RATES

	Actual rates	Simulated Values					
	1979	1980	1981	1982	1983	1984	1985
Canada							
M(15-19)	16.4	15.7	14.9	14.2	13.4	12.6	12.0
F(15-19)	15.8	16.1	15.8	15.4	14.8	14.2	13.9
United Kingdom							
F(15-19)	8.6	10.0	10.5	10.6	10.5	10.2	9.9
United States							
M(16-19)	15.0	13.8	13.3	12.8	12.3	11.7	11.4
F(16-19)	16.3	15.1	14.4	13.6	12.7	11.9	11.4

The teenage population share is projected to decline very rapidly in Canada after 1981. The declining population has a marked effect on the simulation which shows the male and female unemployment rates in 1985 to be 27 and 12 per cent, respectively, below their 1979 levels. The demographic profile for teenagers in the United States is projected to follow similar trends to that in Canada. The simulations show that the projected population decline leads to a rapid fall in both male and female unemployment rates over the period to 198[illegible]. The female teenage population share in the United Kingdom is only projected to decline after 1982 so the simulation shows the unemployment rate increasing over the first three years and then beginning to decline slowly after 1982.

1) This simulation incorporates the technical assumption that the existing special programmes in favour of youth are maintained throughout the period at their 1979 operating levels.

Simulations were also run for the unemployment rates of young adults in Germany, Italy and Japan. In both Germany and Italy the population share of this age group is projected to increase over the medium term and the simulation results (not shown) directly reflect this continued demographic growth. In both cases the unemployment rates of male and female young adults are shown to increase steadily over the period to 1985. The demographic picture in Japan, however, is quite different. The population share of young adults in Japan peaked in 1970-71 and subsequently declined steadily throughout the last decade. The rate of decline is projected to be almost negligible over the next five years. The simulations show that the projected slight fall in the population share is insufficient to outweigh the negative trend effect. The net result is that the unemployment rate of young adults of both sexes drifts up slightly over the projection period.

One can conclude on the basis of these simulations that demographic shifts are likely to have a significant impact on youth unemployment in some Member countries over the next five years, irrespective of the future development of aggregate demand. In countries where the youth share of the working-age population will decline, this should tend, ceteris paribus, to reduce the magnitude of the problem. However, in some Member countries the youth share will continue to increase until 1985 and this will exacerbate excess supply on youth labour markets. It is only after 1985 that both teenage and young adult population shares are projected to decline in almost all countries.

One other implication of these demographic changes needs to be brought out. It is clear that changes in the size of the youth population are likely to affect the development of relative wages. Evidence from the United States suggests that as the number of young workers declines, their wages will increase compared to prime-age and older workers. This in turn will create an incentive for employers to substitute prime-age and older workers and also capital for young workers. How large this latter effect is likely to be depends partly on the ease with which employers can substitute other factors for more expensive young workers. Unfortunately, there is little direct evidence on this substitution effect.(1)

LABOUR FORCE PARTICIPATION RATES

Unfortunately, while explicit account has been taken of projected population shifts in these simulations, it was impossible in the time available to the Secretariat to explicitly incorporate projections of labour force participation

1) For a recent survey of the econometric literature in this area see Daniel S. Hamermesh and James Grant, "Econometric Studies of Labor - Labor Substitution and their Implications for Policy", Journal of Human Resources, Fall 1979. On the issue of the extent of substitution between workers of different ages, they conclude that "the overall picture is one of the easy substitution of young labour for capital and of firms sharply cutting employment of labor force groups whose relative price increases" (p. 533). They also conclude that "the own-price elasticity of demand for young workers exceeds unity" (p. 537).

rates among young people. Thus, the sole existing source of data on participation rate projections for the relevant age groups is a recent publication of the Manpower and Social Affairs Committee.(1) All that can be done here is to briefly summarise the broad picture that emerges from these projections.

Growth of the teenage population in the 1970s was accompanied by declining labour force participation rates in most European countries though not in North America. This mainly reflects trends in school enrolment rates which were generally much lower at the start of the 1970s in Europe than in North America. In the period up to 1985 the decline in teenage participation rates is projected to flatten out somewhat. For the young adults age group, participation rates are much closer to those of the adult labour force. Education is generally a much less significant alternative to work for this age group than for teenagers. However, the sex-specific participation rates differ much more for this age group than for teenagers, e.g. in 1975 the average participation rate for males aged 20-24 in Member countries was 83 per cent compared to 67 per cent for females.(2) In the 1970s participation rates for young adult males tended to decline in most countries whereas participation rates increased for young adult females. Generally the projections to 1985 reflect a continuation of these opposing trends for males and females.

However, an important caveat needs to be registered about these projections of age-specific participation rates. The data were originally obtained from Member countries in 1976 and, though they were updated before publication, are now rather out-of-date. It is also impossible to predict on a priori grounds how a further period of slow growth will modify youth participation rates. This will depend on the relative magnitudes of the so-called "discouraged worker" and "added worker" effects ; the former would tend to lower participation rates in a recession, while the latter should increase them.(3)

1) OECD, Demographic Trends 1950-1990. Paris, 1979.

2) The equivalent averages for teenage males and females in 1975 were 47 and 42 per cent respectively.

3) A recent Canadian study which isolated discouraged and added-worker effects for the period 1953 to 1974, found a "net, though quite small, discouraged-worker effect for most sex-age groups, with hardly any clear evidence of a net added-worker effect for any". See Peter J. Kuch and Shmuel Sharia, "Added and Discouraged-Worker Effects in Canada, 1953-74", Canadian Journal of Economics, February 1978, p. 113. A study of teenage labour force participation in Australia over the period 1964-78 also found evidence of strong discouraged worker effects. See Gregory and Duncan, op. cit.

IV. A MICRO-ECONOMIC ANALYSIS OF YOUTH LABOUR MARKETS

Much recent research into the nature and consequences of youth unemployment has taken the form of detailed studies of longitudinal data and gross labour flows rather than more traditional analyses of trends and fluctuations in the main labour market stocks such as employment, unemployment and participation rates. Cross-section and time-series studies of such stock variables are extremely useful as they can serve to demonstrate how net movements in the characteristics of youth labour markets relate to overall cyclical conditions and other economic and social forces. However, data on labour market stocks do not allow one to identify the associated gross flows. For example, even small changes in the level of unemployment can mask very large changes in the numbers entering the unemployed pool either through leaving or losing jobs or entering the labour force.(1) Thus, flows data are vital if one wants to analyse labour market dynamics. In addition, if one wants to study the behavioural response of young people over time, this is best done with longitudinal or panel data which focus on the individual's behaviour pattern.(2)

Much of the research so far on youth patterns using gross flows and longitudinal data has been conducted in the United States. The two main data sources are (i) the Current Population Survey (CPS) of the Bureau of the Census from which gross flows can be derived ; and (ii) the National Longitudinal Survey (NLS). The rest of this section presents a brief review of the main findings which seem to have policy implications.

There are two main empirical findings : (a) a great deal of present high youth unemployment is explained by very high turnover rates among young people ; and (b) much of youth unemployment is concentrated on a small group who experience serious and prolonged difficulties in the labour market.

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1) As an illustration of the magnitudes involved, consider the following example from the Report of the National Commission on Employment and Unemployment Statistics. While the average unemployment level in the United States in 1976 was 7.3 million, the monthly outflows from and inflows to unemployment averaged 2.8 million. Thus, in an average month there was almost 40 per cent turnover of the stock of unemployed. See National Commission on Employment and Unemployment Statistics, Counting the Labor Force. Washington, U.S. Government Printing Office, 1979, pp. 214-215.

2) For a definition of and an extensive survey of the methodological and empirical advantages of longitudinal data for an analysis of youth labour markets see Edward Kalachek, "Longitudinal Surveys and the Youth Labour Market" which is published in this volume as Annex I. Kalachek mainly reviews the American literature but he also discusses some examples of longitudinal surveys in other OECD countries.

HIGH TURNOVER RATES AMONG YOUNG PEOPLE

Several studies (1) have shown that high turnover rates are a key characteristics of youth, especially teenage, labour market behaviour. One noteworthy feature of these studies is the emphasis they put not only on transitions between employment and unemployment but also on the role of entry to and exit from the labour force. For example, one study, based on gross flows from the CPS (2) showed that in an average month over the period 1968 to 1976 about 15 per cent of teenage males who were in the labour force withdrew while at the same time 21 per cent of those outside the labour force entered the labour force. These rapid transitions also decrease significantly with age, e.g. the same study shows that young adult males are about 60 per cent less likely in any given month to leave employment than teenagers. The extraordinary dynamism of youth shifts between the three labour force states (employment, unemployment, non-participation) is also mirrored by the brevity of average duration of completed spells in each of the states. For example, for teenagers the average duration of a completed spell of employment over the period 1968-76 was about six months compared to fifteen months for those in the young adults cohort and sixty-six months for males aged 25-29.(3) The short duration of spells in the labour force also applies to spells outside the labour force. e.g. the average duration of a completed spell not in the labour force for teenagers was five months. The average duration of a completed unemployment spell is lower for teenagers than older workers, e.g., over the period 1968-76 it was about 1.7 months for teenagers compared to 2.3 months for young adults. This suggests that the sharp differences in age-specific unemployment rates mainly reflect differential rates of turnover rather than differences in average duration of spells of unemployment. Short spells of unemployment can be due to either easy access to new jobs or high rates of labour force withdrawal. Evidence from 1974 shows that almost one-half of unemployment spells among male teenagers ended in labour force withdrawal compared to only one-quarter in the case of older workers.(4) While some of this volatility simply reflects seasonal flows between the education sector and the labour force (e.g. "summer jobs"), the evidence suggests that this is a relatively minor factor.(5)

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1) See Kim B. Clark and Lawrence H. Summers, "The Dynamics of Youth Unemployment" ; Linda S. Leighton and Jacob Mincer, "Labor Turnover and Youth Unemployment", (both papers are published in Freeman and Wise (eds.), op. cit.). See also Martin Feldstein and David Ellwood, "Teenage Unemployment : What is the Problem ?", Harvard Institute of Economic Research Discussion Paper No. 730, December 1979.

2) Clark and Summers, ibid.

3) The experience of black teenagers is even less favourable since the average duration of a completed spell of employment is only 75 per cent as long as that for a white teenager.

4) Kim B. Clark and Lawrence H. Summers, "Labor Market Dynamics and Unemployment : A Reconsideration", Brookings Papers on Economic Activity, 1 ; 1979, Table 1.

5) Clark and Summers, "The Dynamics of Youth Unemployment", op.cit.

While it is clear that "job instability" can explain much of the teenage unemployment problem, there is much less agreement over the causes and consequences of these observed high turnover rates. The frequency of teenage labour force transitions, especially in and out of the labour force, has led some to conclude that mixed spells of unemployment and non-participation are virtually equivalent.(1) They would argue that focusing solely on unemployment rates and the brevity of most unemployment spells tends to underestimate the magnitude of the teenage unemployment problem. In this view lack of suitable job opportunities is the major factor behind high turnover rates and, as partical support for this hypothesis, the strong empirical relationship between teenage participation rates and changes in aggregate demand is usually cited.(2)

However, an alternative view (3) argues that it is vital to distinguish between those teenagers who are unemployed and out of school from those who are registered as unemployed but are also full-time in school on the grounds that the problems of the former group are very different from those of the latter. In early 1976 male teenagers who were out of school and seeking full-time jobs accounted for only half of all teenagers who were officially registered as unemployed. If one regards full-time school enrolment as a satisfactory alternative to employment for this age group, given the importance of schooling for life-cycle patterns, the private and social problems of unemployment are much more severe for those out of school teenagers than for those in school. The persistent pattern of short employment spells for the out of school group, punctuated in many instances by labour force exits, is used to support the argument that many out of school teenagers show weak labour force attachment. It is also argued that most teenagers who withdraw from the labour force are not "discouraged" workers.(4)

The consequences of such high turnover rates are also in dispute. Advocates of the human capital model stress the positive benefits, in terms of an improved age-earnings profile, from early investment in training and work experience. If no such investment occurs during the early years of labour market participation because of the high incidence of unemployment spells, the individual's lifetime wealth will

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1) Clark and Summers are the main proponents of this viewpoint. The clearest statement of their position is in their Brookings Papers article, pp. 23-31.

2) See Clark and Summers, "The Dynamics of Youth Unemployment", op. cit.. Their econometric estimates, based on both annual and monthly data for the period 1948-77, show that for male teenagers each one point decrease in the prime-age male unemployment rate (used as a proxy for aggregate demand) increases the teenage employment rate by 4.5 per cent. Two-thirds of this response comes from a reduction in unemployment and the remainder from rising participation.

3) See Feldstein and Ellwood, op. cit., whose results are based on a detailed analysis of the records on over 5,000 individual teenage males from the March 1976 CPS. A similar argument is put forward by Michael L. Wachter, "The Dimensions and Complexities of the Youth Unemployment Problem", in Bernard E. Anderson and Isabel V. Sawhill (eds.), Youth Employment and Public Policy, Englewood Cliffs, New Jersey : Prentice-Hall, 1980.

4) Feldstein and Ellwood show that in their sample, only 21 per cent of male teenagers out-of-the labour force would like a job but believe that search would be fruitless.

be reduced. Dual labour market theories would also lend support to such a "scarring" hypothesis. Long spells of unemployment and non-participation are likely to adversely affect development of good work habits and experience. This will be accompanied by a tendency to shift into the secondary and unstable job market. However, search models of labour market behaviour would suggest that some shopping around is both desirable and necessary for teenagers. Youth labour markets are typically characterised by severe informational imperfections on the part of both employers and job seekers. Thus, a period of job search should be a productive investment for most teenagers.

Empirical evidence on "scarring" effects is very limited. A recent study (1) suggests that so-called state or experience dependence is a real phenomenon in the sense that a prolonged period of unemployment at an early age may render the individual more prone to unemployment spells in later life. For example, Ellwood argues, on the basis of his empirical results, that a 26-week spell of unemployment will raise the expected duration of unemployment two years later by two weeks. However, his results also suggest that this effect decays rather rapidly over time.

The main adverse impact of early unemployment appears to be reflected in lower earnings in the future. Young people who experience prolonged spells of unemployment naturally tend to have less work experience than their more successful peers. This lack of work experience appears to translate directly into lower lifetime earnings and career prospects.(2)

As for the search model, the observed short tenure of jobs among teenagers has been cited to cast doubt on the empirical relevance of this theory for the teenage labour market. Since the main motivation for search lies in the individual anticipating a reasonable rate of return on his costly investment in search time and since the return depends crucially on the expected duration of an acceptable job uncovered by search, such observed brief employment durations among teenagers indicate little payoff to investment in search.

Clearly these conflicting interpretations of both the causes and consequences of high turnover rates rest very heavily on the degree to which they are regarded as voluntary or involuntary responses by teenagers. Those who interpret the evidence as indicating weak labour force attachment in the early years argue that early unemployment and long spells of non-participation may represent consumption of leisure, e.g. teenagers may wish to spend a period of "messing around" before settling down to an established career pattern. Others would argue that, on the contrary, high turnover rates mainly reflect job shortages. In support of this contention, they quote a large body of empirical evidence showing that teenage unemployment is very strongly influenced by changing cyclical conditions.

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1) David Ellwood, "Teenage Unemployment : Permanent Scars or Temporary Blemishes", in Freeman and Wise (eds.), op. cit.. See Annex I, for a good discussion of the issue of distinguishing heterogeneity from state dependence using longitudinal data.

2) See Ellwood, ibid. ; also David Wise and Robert Meyer, "High School Preparation and Early Labor Market Experience", in Freeman and Wise (eds.), op. cit..

Finally, the separate roles of quits and layoffs in the turnover process are important factors which should be considered. Quitting is initiated by the worker while layoffs are at the discretion of the employer who is also engaged in a search process for suitable manpower. The behavioural responses underlying these two components of job turnover are clearly rather different. Unfortunately, the role of these factors in explaining observed youth labour market experiences is not well understood.

THE "HARD-CORE" ELEMENT IN YOUTH UNEMPLOYMENT

One empirical result which comes out clearly from several recent studies is that the burden of youth unemployment is unevenly distributed across young people ; there is a small group of individuals who experience serious and prolonged difficulties in the labour market. Data from the 1974 annual work experience survey in the United States allow a comparison of the distribution of unemployed persons and unemployed weeks. The results indicate significant concentration of unemployment especially among teenagers. While about seventy per cent of all spells of unemployment among male teenagers are completed in less than one month, Clark and Summers point out : (1)

> "Over half of all unemployment among this group is attributable to the 8.4 per cent of its members who are unemployed for more than six months during the year".

Thus rather than there being an even distribution of unemployment among young people which the existence of brief average durations of completed spells might lead one to expect, the burden of unemployment is highly concentrated.(2) A similar pattern of concentration is also found among adult workers. A study of the incidence of unemployment among out-of-school male teenagers in 1976 came to very similar conclusions. While less than 10 per cent of this group were unemployed for more than 26 weeks, they accounted for 51 per cent of all unemployment.(3) The members of this hard-core group tend to share several characteristics, e.g. they are less well-educated than the typical teenager, while black and other racial minorities are over-represented. The hard-core element in youth unemployment also appears to be unevenly distributed across geographic areas. It is likely to be a more intractable problem in areas of high unemployment where the local labour

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1) Clark and Summers, Brooking Papers on Economic Activity, op. cit., p. 35. The corresponding calculation for female teenagers indicates that the 6.1 per cent of unemployment spells which last more than six months accounted for 44 per cent of all weeks of unemployment.

2) This concentration of unemployment results from two factors. First, there is a natural tendency for the tail in any probability distribution to account for a significant share of the weight. Second, if the probability of exit from unemployment declines with duration, this will tend towards concentration on the long-term unemployed.

3) Feldstein and Ellwood, op. cit.. They estimate that the numbers in this group are roughly 250,000.

markets cannot offer the same range of job opportunities to young people as are available in more prosperous and expanding localities.(1)

Finally, what limited evidence there is suggests that the employment experience of this hard-core group does not improve significantly as they grow older and move into the 20-24 age group.

CAN THESE FINDINGS BE GENERALISED TO OTHER MEMBER COUNTRIES ?

These findings, especially the latter one showing the heavy incidence of long-term unemployment among a relatively small group of disadvantaged youth, have major implications for policy. However, it must be stressed that so far all this research is United States-specific and we simply do not know the extent to which such findings can be generalised to other Member countries.

The youth labour market in North America is very different in several respects from most other Member countries. First, the whole school-work nexus is very different, e.g. in 1976 30 per cent of male teenagers and 26 per cent of female teenagers in the United States combined full-time school enrolment with labour force participation.(2) Second, the degree to which teenage unemployment is concentrated among members of racial minorities such as blacks, is becoming worse in the United States.(3) Indeed, it has been stated that the worsening employment problem among young blacks "can be viewed as the essence of the youth employment problem in the United States".(4) However, it may still be the case that youth unemployment is heavily concentrated on a small minority of youth in other countries as well as the United States. The sole difference would be that the exact composition of such a hardcore group would vary from one country to the next. Finally, one cannot neglect the influence of the differing cyclical conditions in the United States compared to most other Member countries since 1974/75. While the United States has experienced a sustained period of economic growth which has involved the creation of an unprecedently high number of jobs, (5) growth rates in most other OECD countries have been below capacity for several years. The evidence quoted in Section II showed that average duration of interrupted spells among youth has increased over

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1) Geographic disparities in youth unemployment rates are also related to the industry mix in particular areas. In local labour markets where there is a heavy concentration of youth-intensive industries and economic growth is rapid, this will tend, ceteris paribus, to reduce the incidence of hard-core unemployment among young people. For evidence showing the powerful impact of local labour market growth and industry mix on rates of youth unemployment across more than one hundred local labour markets in the United States, see Richard B. Freeman, "Economic Determinants of Geographic and Individual Variation in the Labour Market Position of Young Persons" (mimeo., National Bureau of Economic Research, March 1979).

2) Demographic Trends 1950-1990, op. cit., Table 8.

3) See Newman, Monthly Labor Review, op. cit..

4) Richard B. Freeman and James L. Medoff, "The Youth Labour Market Problem in the United States : An Overview", in Freeman and Wise (eds.), op. cit..

5) Civilian employment in the United States in 1979 was over 14 per cent higher than in 1975.

the past four years in virtually all Member countries except the United States. If this rising average duration has been accompanied by a decline in turnover rates, this must have had a significant negative impact on youth employment opportunities which was absent in the United States.

In some European countries this period of sluggish growth has given rise to increasing demands on the part of workers for more job security.(1) To the extent that such increased job security provisions have been obtained, part of the costs in the form of reduced labour turnover may have been shifted on to the unemployed and new labour force entrants. As youth are typically over-represented in both the pool of unemployed and also the flow of new entrants into the labour force, improved job security provisions are likely to have reduced the available job opportunities in addition to the negative employment effect of cyclical shortfalls.

Canada is the only other Member country, so far as the Secretariat is aware, which has undertaken systematic analysis of the various labour force transitions by broad age groups. Canadian research (2) on labour market dynamics has been based on data from two different sources. One is gross flows information obtained from the Monthly Labour Force Survey. The gross flow estimates obtained so far have been experimental in nature, especially with regard to disaggregation into age groups, and the results derived from them should therefore be interpreted with some caution. However, more reliable and refined estimates are expected in the near future. The other Canadian source of gross flows data is not based on a truly longitudinal survey, such as the Monthly Labour Force Survey, but on panel data ascertaining the respondents' behaviour over a past period through recall. One example is Statistics Canada's Annual Work Patterns Survey.

Experimental gross flows information, based both on longitudinal data of the Labour Force Survey and retrospective data from the Annual Work Patterns Survey, indicate that high youth unemployment rates in Canada are due primarily to instability and frequent turnover. Young people aged 15-24 (3) are much more likely to separate from employment than are older workers. They may be as much as twice as likely to move from employment to unemployment, and even more prone to withdraw from the labour force upon employment separation, although part of this latter movement is the seasonal return of students to school. By the same token, youth also have higher rates of labour force entry than do adults. Thus, young people in Canada are more likely to experience spells of unemployment than are older workers.

With regard to the above flow patterns it is interesting to note that Canadian youth exhibit a behaviour relative to adults which appears to be very similar to that of their American counterparts. In one respect, however, the pattern of Canadian youth seems to differ from that of American young people. Thus, preliminary indications are that Canadian youth, and especially males, may be somewhat less

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1) For a discussion of this phenomenon together with some evidence, see OECD, "Manpower and Employment Measures for Positive Adjustment", Paris, June 1979, Annex I (for general distribution).

2) The following discussion draws heavily on information supplied to the Secretariat by the Canadian authorities.

3) A further age breakdown is not presently possible.

likely to withdraw from the labour force when unemployed than are their U.S. counterparts.

Canadian data also corroborate the United States finding that a large fraction of all youth unemployment (time spent jobless) is attributable to persons out of work for very long periods of time. Annual Work Patterns Survey data, for example, show that slightly less than 24 per cent of youth (15-24) experiencing unemployment during 1977 accounted for over 50 per cent of the total number of months of unemployment suffered by the group in that year. Thus, the burden of unemployment appears to be highly concentrated in Canada.(1) The possible implication from this is that a particular segment of young persons is systematically and repeatedly suffering severe unemployment so that they may be said to stand out as an especially "hard hit" sub-group of unemployed youth. There are also preliminary indications that the "severely unemployed" tend to repeat their experience. A young person suffering long-duration joblessness in one year has a high probability of having lengthy unemployment the next year. In turn, this suggests the possibility that "severe youth unemployment" may be traced to certain personal and environmental characteristics of youth. In fact, the preliminary Canadian analysis suggests "severe unemployment" among youth to be systematically and significantly related to lack of education, difficulty in making the transition from school to the world of work (obtaining the first job), living in a high unemployment region and a non-metropolitan area.

On balance it can therefore be concluded that the United States findings from micro-economic analyses of youth labour markets appear to be reasonably appropriate to the situation in Canada as well.

Unfortunately, there are only scattered pieces of evidence available on these issues for other Member countries. A recent ILO publication (2) presented data for 1977 on the probability of remaining unemployed for successive time-intervals in the Netherlands and the United Kingdom. In both cases this probability uniformly increased with age for both sexes. Since young people had a relatively low probability of remaining unemployed, the report concluded that "the high rate of youth unemployment reflects a very high inflow of youth into unemployment".(3) Estimates of mean durations of completed spells of unemployment by age and sex are available for the United Kingdom covering the period 1963-73.(4) The results show the same

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1) It should be noted that the concentration of unemployment is also quite high for adults over 25 years of age.

2) ILO, Growth, Structural Change and Manpower Policy : The Challenge of the 1980s. Report of the Director-General to the Third European Regional Conference, Geneva, October 1979.

3) Ibid., p. 36.

4) J.K. Bowers and D. Harkess, "Duration of Unemployment by Age and Sex", Economica, August 1979. There is also some indirect evidence for Great Britain from a study by Disney which uses data provided by the Department of Health and Social Security to examine the concentration of unemployment in 1971-73 among three cohorts of individuals born in the years 1923, 1933 and 1943. The results show that, while the youngest cohort experienced the shortest completed spells of unemployment, the concentration of unemployment within that cohort (aged 28 in 1971) was similar to the older cohorts due to a higher proportion of spell recurrence. See Richard Disney, "Recurrent Spells and the Concentration of Unemployment in Great Britain", Economic Journal, March 1979. Unfortunately, the analysis does not extend to include the teenage and young adult cohorts.

pattern as the North American studies : young people have significantly lower mean durations than other age groups. A comparison of durations of male unemployment for January 1977 with predicted durations based on various assumptions about pre-1973 trends indicates a further decline since the end of 1973 in mean durations for the 16-18 age group against all other workers. This, however, contrasts with the experience for the 18-25 age group whose relative position appears to have deteriorated against all other age groups since 1973.

Additional evidence is provided by a study of chronic job changing among school-leavers in a local labour market in the United Kingdom.(1) "Chronic job changers" were defined as those youth who changed jobs, on average, more than once every six months. They accounted for only 3 per cent of all youth aged 15-17. However, these youth accounted for a disproportionate share of all job changes and unemployment in this age group. The evidence also indicated that those individuals who were chronic job changers between the ages of 15 and 17 continued to change jobs between the ages of 18 and 20 at an above-average rate. A follow-up study (2) of these youth to the age of 22 showed that most of the chronic job changers continued to change jobs at an above-average rate. A high proportion of these job changes originated in dismissals mainly for disciplinary reasons, e.g. the inability or unwillingness of these young people to achieve good work habits. Since chronic job changers tended to have low levels of education and skills, it appears very likely that they are also over-represented in the hard-core unemployed in later life.Unfortunately, there is, as yet, no direct evidence on this latter point.

1) J.L. Baxter "The Chronic Job Changer : A Study of Youth Unemployment", Social and Economic Administration, Autumn 1975.

2) J.L. Baxter, "Youth Unemployment in Great Britain - Job Changing and Youth Unemployment", in Barrie O. Pettman and John Fyfe (eds.), Youth Unemployment : Great Britain and the Federal Republic of Germany, Bradford : MCB Publications, 1977.

V. SOME UNRESOLVED ISSUES

There is general agreement that shortfalls in aggregate demand and demographic shifts have both significantly contributed to the current youth unemployment problem. There also appears to be agreement that these two factors alone are not sufficient to account for the present scale of the problem ; other so-called "structural" factors have clearly played a role in raising youth unemployment in many countries.(1) The econometric evidence in Section III provides some indirect evidence in support of this hypothesis since it points to a secular deterioration in the ratio of the youth to adult unemployment rate over and above what can be explained by cyclical and demographic factors.

The purpose of this section is to discuss some of the main hypotheses that have been put forward to explain this aspect of youth unemployment.

THE ROLE OF RELATIVE WAGES

One argument which is often expressed (2) is that recent developments in relative wage rates have tended to price youth out of the labour market.(3) The earlier diagnosis, when discussing this issue, simply reviewed some scattered evidence on relative wage rates and came to the agnostic conclusion :

> "There is no strong evidence that youth are increasingly being priced out of the market ; but then, there is no strong evidence that they are not, either".(4)

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1) For example, the earlier diagnosis drew attention to the role of factors such as growing non-wage labour costs, regulatory constraints on employers' hiring and firing decisions, minimum wage structures and transfer programmes which have raised youth reservation wages. The case that structural factors have significantly contributed to the high youth unemployment rates in the United States is strongly argued by Wachter, op. cit..

2) See P. Stricker and P. Sheehan, "Youth Unemployment in Australia : a Survey", Australian Economic Review, 1st Quarter 1978 ; Richard Blandy, "Youth Unemployment", Australian Bulletin of Labour, June 1979 ; Richard Layard, "Youth Unemployment in Britain and the U.S. Compared", in Freeman and Wise (eds.), op. cit. ; and Makeham, op. cit..

3) This argument is separate from the hypothesis that the aggregate real wage in the economy is too high relative to current levels of productivity. Such a real wage problem might have a more than proportionate impact on youth employment since young people as a group may be one of the least competitive in the labour market.

4) OECD, Youth Unemployment, op. cit., vol. I, p. 46.

Because this issue has important implications for policy, the basic theory is first discussed and then the available empirical evidence is reviewed.

In essence the "overpricing" hypothesis is based on a standard neo-classical model of the labour market. The demand curve for any type of labour is assumed to be downward sloping with respect to the real wage rate for that labour input. Thus, an exogenous rise in the real youth wage will, ceteris paribus, result in a decline in the demand for youth labour. However, the overpricing hypothesis is difficult to test by simply correlating relative wage trends with youth employment and unemployment changes. The main empirical difficulty is to separate out the wage effects from other exogenous influences.

First, the model produces an unambiguous prediction for changes in relative youth wages and youth employment only with respect to shifts along a given labour demand curve. If the demand curve for youth labour is itself shifting at the same time, this is an additional influence affecting youth employment which has to be disentangled. For example, suppose there is a shift in the composition of aggregate demand towards goods which are intensive in inputs of youth labour. This output effect will serve to increase employers' demand for youth, thus partly or wholly offsetting the negative impact on youth employment of the rise in relative wages.

Second, one must also allow for substitution between youth and other age groups and capital.(1) If, as is sometimes assumed, production functions in the very short run are characterised by fixed input coefficients, then an exogenous rise in the relative youth wage will simply result in a decline in the firm's output and a fall in the number of youth employed. However, if there is some substitutability among inputs, which seems the most likely outcome in any time-horizon other than the very short run, an increase in relative youth wages will give rise to substitution against youth in favour of other types of labour and capital. If the degree of substitutability between youth and other labour force groups differentiated by age is very strong, this factor will tend to offset the initial rise in the youth relative wage, since the demand for youth will now decline at any given relative wage. Nevertheless, there is a clear presumption that a sustained rise in youth relative wages would have adverse effects on youth employment prospects.

Finally, one should also allow for the role of supply-side influences in determining relative wages. In countries where there has been a significant rise in the youth share of the working-age population, it is reasonable to expect this shift in the age composition of the labour force to have affected the structure of relative wages independently of shifts in demand.

Thus, in order to establish whether there is any merit in the "overpricing" hypothesis the first step is to check whether there have been any trends in relative

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1) Obviously, if young workers are perfect substitutes for older workers, there would be no need to disaggregate the labour force by age. For an empirical analysis showing this is not the case see Joseph M. Anderson, "Substitution among Age Groups in the United States Labor Force", Research Paper No. 18, Williams College, December 1978 ; also, John M. Abowd and Richard Layard, "Substitution Between Sex- and Age-Groups in Labour Demand", Centre for Labour Economics Working Paper No. 110, London School of Economics, December 1979.

youth wages. Second, such trends if they do exist, have to be related to the behaviour of youth employment and unemployment over the same period of time, making due allowance for the influence of other quantifiable factors.

In carrying out such an exercise one must bear in mind the empirical observation that youth employment typically declines relative to adults during a recession.(1) It is, thus, not sufficient simply to draw attention to a rise in the ratio of youth to adults' unemployment rates since 1973/74 such as occurred in many Member countries (see Section II). It must be established that the "anti-youth" bias is different during the recent period of below-capacity growth from that in previous recessions after controlling for various other influences such as selective manpower policies in favour of youth. If such an exercise showed that the bias since 1973/74 was no greater than in previous recessions, prima facie this would constitute strong evidence against the overpricing hypothesis. In assessing the degree of "anti-youth" bias between recessions, one needs to focus not only on the ratio of youth to adult unemployment rates but also on the ratio of employment shares.(2)

The evidence so far on these issues is fairly sketchy. Australian evidence (3) suggests that over the period 1966 to 1976 there was a modest rise of some six percentage points in the ratio of hourly earnings of junior males to adult male earnings with most of the increase occurring after 1972.(4) In the case of junior females the relative wage ratio showed little change over the whole period though it tended to decline somewhat before 1972 and rise after 1972. On the basis of a rather impressionistic review, the conclusion was drawn "that the influence of the relative wage movements has been at most modest".(5) In the case of the United States, CPS data on median weekly earnings for out-of-school males aged 16-24 relative to all white males aged 25 and over show declines over the period 1967 to 1977 for each age group of the order of ten percentage points. However, in the case of young blacks, while their relative earnings also declined somewhat relative to those for adult white males, the deterioration was much less than that observed for young whites. This implies a relative improvement over the period in the earnings of young blacks vis-à-vis young whites. As all indicators of labour market performance show a marked deterioration in the position of young blacks, these changes may possibly

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1) See E. Kalachek, The Youth Labor Market. Policy papers in Human Resources and Industrial Relations No. 12, Ann Arbor, Mich. : The Institute of Labor and Industrial Relations, University of Michigan and Wayne State University, 1969.

2) The problem here is that the ratio of unemployment rates is affected by differential labour force participation effects. This point is made by W.M. Corden, "Wages and Unemployment in Australia", Economic Record, March 1979.

3) Stricker and Sheehan, op. cit..

4) Australian Bureau of Statistics, Earnings and Hours of Employees. This survey defines all junior (i.e. aged less than 21) employees earning adult rates as adults. Accordingly, the trend experienced in recent years towards the granting of adult rates for juniors 18 years and over is not reflected in these statistics. This also implies that the increase in the earnings of juniors to adults is understated in the statistics.

5) Stricker and Sheehan, op. cit., p. 24. Blandy concludes after a review of the Australian evidence "youth pay (especially female youth) has increased relatively to adult pay since 1972, which cannot have improved youth's chances in the labour market" (op. cit., p. 24, emphasis in original).

be the outcome of shifts along a relative demand schedule in response to changes in the minimum wage or anti-discrimination legislation.(1)

A detailed comparison (2) of changes in the earnings of manual workers in the original Member countries of the EEC, based on analysis of the results of the Community Structure of Earnings surveys of 1966 and 1972, shows that the age differentials narrowed in all countries over the period. This increase in the earnings of juveniles (defined as all those under 21 years of age) relative to adults was observed for both sexes. The smallest changes occurred in Italy and Germany where the age differentials were lowest in 1966 and the greatest changes occurred in Belgium and France. In the latter case the earnings of juvenile males relative to adult males increased from 72 per cent in 1966 to 78 per cent in 1972, while for juvenile females the earnings differential narrowed by eight percentage points over the same period. Unfortunately, no such comparable data are currently available to show whether this declining age differential has persisted since 1972. However, the results from the 1978 Community Survey should be available in the near future to answer this key question.

In the United Kingdom, average hourly earnings of young males have certainly risen considerably as a percentage of adult male earnings : for manual workers from 45 per cent in 1948 to 62 per cent in 1976 with a particularly sharp rise after 1972. For young females the position is much less clear as relative earnings seem to exhibit large annual fluctuations around a slowly rising trend. However, when relative pay levels were included as explanatory variables in regressions with both male and female youth unemployment rates as dependent variables, they did not appear to be systematically correlated with variations in youth unemployment.(3) However, this negative result contrasts with another study of United Kingdom experience which showed that the unemployment ratio of young males to adults was significantly related to relative wage movements over the period 1959 to 1976.(4) In addition, an analysis of age and sex-specific demands for labour in British manufacturing over a similar time-period found very significant relative price effects. A general system of labour demand equations was estimated to assess the impact of relative wages on four categories of manual workers : young males, girls, women and men. The econometric results suggested relatively high short-run wage elasticities of demand for young males (-1.3) and women (-1.6) but rather low elasticities for girls and men (-0.3 in each case), linked to quite high substitutability between the various age-groups. The conclusion from these results is that "one has some confidence in supposing that youth wages are highly relevant to the problem of youth unemployment".(5)

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1) Richard B. Freeman, "Why is There a Youth Labor Market Problem ?" op. cit.

2) David Marsden, A Study of Changes in the Wage Structure of Manual Workers in Industry in Six Community Countries since 1966, and Proposals for the Development of Future Community Surveys. Sussex European Research Centre, University of Sussex, July 1979.

3) Makeham, op. cit.

4) Layard, op. cit.

5) Layard, ibid., p. 26.

Finally, some additional confirmation of the role of relative wage developments comes from a four-equation econometric model of the workings of the youth labour market in the Netherlands over the period 1953-74.(1) The results showed that for males in both the 14-18 and 19-24 age groups the rise in relative wages did have a significant positive effect on youth unemployment. However, the effect of changes in relative wages was overshadowed by changes in the rate of growth of job opportunities. In the case of young females in the 19-24 age group, however, relative wage effects were also significant and dominated changes in job opportunities as an explanatory factor. The study also stressed the key role of the minimum wage in affecting wages of young people.

This review of the available empirical evidence does appear to point to the conclusion that relative wage developments have indeed partly contributed to youth unemployment in some Member countries. However, the tentative nature of this conclusion must be stressed ; it awaits further confirmation on the basis of detailed empirical studies.

As a related issue it is important to bear in mind that wages are only one component of labour costs to the firm. There are a whole range of non-wage labour costs as well, e.g. payroll taxes for unemployment insurance, health and other social security benefits, pension contributions, training costs, fringe benefits such as holiday pay, etc..(2) If, as is the case in many Member countries, social security contributions are bounded by ceilings, they will represent a larger fraction of total labour costs, the lower the wages in question. As youth wage rates are typically below adults in the same occupations and industries, an increase in the non-wage component of labour costs will make youth less attractive to hire unless the incidence of such payroll taxes is fully shifted back to young workers in the form of lower wages. In addition, to the extent that such non-wage elements have accounted for a larger share of labour costs in recent years, they may have contributed to the growing "quasi-fixity" of labour as a factor of production. This should induce employers to view the hiring of additional workers as an investment decision. Any investment involves costs which have to be discounted over time against the expected returns from making the investment. As youth wage costs typically embody a larger share of capital expenditure than adult labour costs, employers will be reluctant to hire youth, especially in a period of uncertainty about aggregate demand prospects.

Recent research (3) into such non-wage labour costs shows that their share of total labour costs has typically increased over time. However, so far there is no

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1) A. Bouman, H. Heijke and J. de Koning, Ontwikkeling en Oorzaken van Jeugdwerkloosheid. Ministerie van Sociale Zaken, September 1979.

2) Not to speak of the non-monetary costs of hiring and firing due to increased regulatory interventions and collective bargaining provisions.

3) See Stephen Nickell, "Unemployment and the Structure of Labour Costs", in Karl Brunner and Allan H. Meltzer (eds.), Policies for Employment, Prices and Exchange Rates. Carnegie-Rochester Conference Series on Public Policy, Volume II, Amsterdam: North Holland, 1979 ; F.X. Kirwan, "Non-Wage Costs, Employment and Hours of Work in Irish Manufacturing Industry", Economic and Social Review, April 1979.

evidence on the distribution of such non-wage costs by age. We do not know to what extent, if any, the relative increase in non-wage costs has fallen more heavily on youth than on other groups of workers.

The explanation for giving such attention to trends in relative wage and non-wage costs is that, unless one can demonstrate that relative wages and growing fixity of labour costs account for part of the present youth employment problem, the oft-proposed remedy of a fall in the relative real wage of youth to other labour force groups would not be appropriate. Such a reduction could be achieved either by direct wage subsidies tied to the employment of youth or by negative subsidies, e.g. payroll taxes on youth could be partly or completely abolished. Indeed, several Member countries have introduced temporary measures designed to lower the costs of hiring youth relative to adults.

"DEAD-END" JOBS

Recent analyses of youth unemployment have stressed the role of the secondary labour market as a source of youth jobs which offer only unstable employment at relatively low wages with little or no prospects of career advancement. Indeed, the growth of such "dead-end" jobs is often quoted as one factor accounting for the high youth turnover rates discussed in Section IV.(1) "Dead-end" jobs are not exclusively low-wage jobs, and their existence tends to be influenced to a great extent by the local labour market situation. The distinguishing characteristic is that such jobs offer little prospect either of a stable career pattern or useful training and experience ; it is this factor which singles them out from jobs that may offer low wages to youth initially but compensate by increasing human capital. Analysis of the EEC earnings surveys (2) shows that young manual workers tended to be concentrated in low wage/low skill occupations and industries. The same report also pointed to a weak association between the type of jobs held by individuals when young and the jobs they are likely to have as they grow older.

Clearly "dead-end" jobs are not a new phenomenon ; it is also impossible to assess with available data whether such jobs have become more important in youth labour markets in recent years. However, to the extent that the main problem of youth unemployment is the existence of a minority disadvantaged group, it is clearly important to establish the link, if any, between these two phenomena. Does the hard-core group of youth unemployed tend to get trapped into "dead-end" jobs or do such jobs mainly get filled by a continuous flow-through of youth for whom such employment has no significantly adverse impact on their lifetime career prospects ? So far what

1) OECD, Youth Unemployment, Vol. I, p. 38.

2) Marsden, op. cit.

little evidence there is available on this issue is rather ambiguous (1) and the OECD Secretariat attaches a high priority to trying to remedy this gap in our knowledge about youth labour markets.

YOUTH ASPIRATIONS

Related to this latter issue is the vexing question of youth aspirations towards work and leisure. The previous diagnosis put the issue as follows :

> "The literature on youth attitudes is sparse, but there does seem to be growing demand for meaningful work and an avoidance of repetitive, monotonous tasks. This would imply that youth might be more hesitant than in the past to accept certain kinds of jobs which would further imply an increase in youth unemployment rates. How much of the increase this growing selectivity could explain is not known. Nor is it known whether the recession itself could reverse the trend. Aspirations are not entirely divorced from expectations".(2)

Because of the importance of this issue, CERI has underway a project to investigate the issue of youth attitudes and how they relate to observed behaviour of young people both at school and work. The research is not yet completed and any conclusions must of necessity be premature at this stage. However, some trends are beginning to emerge which may help to enlighten these difficult issues. One point is very clear : attitudes and values held by young people with respect to working life differ widely and appear to be correlated with various socio-economic factors such as status of parents, educational attainment, etc.

Unskilled Youth : Young people with little or no skills are constantly identified as a priority target group for special measures. This special treatment is usually justified on the grounds that such young people, particularly those with no formal qualification are over-represented among the unemployed and need help in securing a stable foothold in employment. Fears are also sometimes expressed that prolonged unemployment for such young people may have serious consequences for social cohesion.

Evaluations of specific policy measures to aid the disadvantaged young unemployed as well as investigations of their "social" behaviour tend to show that both the policy objectives identified and the political fears formulated about them, are somewhat at variance with reality. Far from being consistently restless and

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1) See Charles Brown, "Dead-end Jobs and Youth Unemployment", in Freeman and Wise (eds.), op. cit.. Bosanquet and Doeringer, after discussing the applicability of dual labour market theories to Great Britain, concluded that "the youth labour market has many of the characteristics we have described as secondary". See Nicholas Bosanquet and Peter B. Doeringer, "Is there a dual labour market in Great Britain ?", Economic Journal, June, 1973, p. 433. For a critique of their empirical evidence see K. Mayhew and B. Rosewell, "Labour Market Segmentation in Britain", Oxford Bulletin of Economics and Statistics, May 1979.

2) Youth Unemployment, Vol. I, op. cit., pp. 43-44.

angry, many of these young people can best be characterised as increasingly apathetic and detached from their social environment, showing little interest in improving their life prospects (1) or in actively escaping the dead-end jobs their lack of qualifications opens to them.(2) Furthermore, despite the lack of attractive job opportunities in the local labour market, many young people from low socio-economic status families often refuse to move away from their locality to secure better employment.(3)

Generally speaking the available evidence indicates that these young people approach the labour market having already conditioned themselves to take as little advantage of existing opportunities as possible. As a recent British study puts it, "the direct effects of selection by ability on the part of the employers are of less importance than the self-selection which occurs when boys set their sights on a particular range of occupations...".(4) In other words, these young people are often extremely "realistic" about job prospects. The end result seems to be that they often accept joblessness pragmatically, enduring unemployment rather than challenging it. This "coping" response simply reflects the attitudes of their parents and the local communities who have long experience in coping with unemployment and unsatisfactory working conditions.

The ability to cope with unemployment can, however, have unfortunate long-run consequences. Acceptance of one's limited prospects, apathy and resignation usually reflect a low sense of self-confidence on the part of these disadvantaged young people. There is also evidence that this lack of self-confidence is positively correlated with subsequent unsatisfactory labour market history : individuals who lack self-confidence tend to have lower lifetime earnings and exhibit less upward mobility than their more confident peers.(5) Thus, one partial explanation for the limited effectiveness of programmes for disadvantaged youth is that they may have tended to overemphasise the need to upgrade basic skills without paying due attention to improving self-confidence. More direct evidence comes from evaluations of some national programmes. For instance, a major objective stressed by the Australian "Educational Programme for Unemployed Youth" is explicitly to improve the self-confidence of youth as well as raise their basic skills.(6) Similarly a recent Nordic study shows how important it is for a successful programme for the young unemployed to allow for an active youth participation in real life work situations.(7)

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1) Klaus Schweikert, Off to a Bad Career Start. Vocational Training Research Series, Vol. 55, 1979, Schroedel Verlag, Hanover.

2) ISFOL-CENSIS, "Atteggiamenti dei Giovani nei Confronti del Lavoro", Quaderni di Formazione, No. 38-39, 1977.

3) See Schweikert, op. cit. ; Work Experience on Employers' Premises : A participant's View. Youth AID, 1979.

4) Roger Thomas and Diana Wetherall, Looking Forward to Work. Office of Population Censuses and Surveys, HMSO, 1974, p. 185.

5) See National Commission for Employment Policy, Expanding Employment Opportunities for Disadvantaged Youth. Washington, U.S. Government Printing Office, December 1979, pp. 69-71.

6) Evaluation of EPUY : Preliminary Report. Canberra, 1979.

7) Benny Dylander, Measures Against Youth Unemployment. Forastaltninger mod ung Domsarbejdsløsheden i Fire Nordiske Lokalområder, Nordic Council, 1979.

Such evidence suggests that high priority should be given in programmes targeted to the disadvantaged to the importance of building up their sense of self-esteem. Needless to say, this objective can best be achieved by providing these youngsters who have definitely rejected schools and further formal education, with what they most need, i.e. real employment experiences rather than laboratory-based skill training.

Better-Educated Youth : While unemployment rates among young people typically tend to decline with the level of education, more and more young people with above-average educational qualifications are experiencing spells of unemployment in the current depressed labour market situation. Indeed, some Member countries (e.g. Italy, Spain) have very high rates of unemployment among young people holding higher education degrees.

Up to now policy-makers have devoted little specific attention to improving the employment prospects of such young people. Yet many qualified young people do face transition problems in entering the labour force and in recent years these difficulties have been aggravated by trends in education combined with a less buoyant labour market.

These young people belong, by and large, to social classes encouraged to subordinate immediate gains to the principle of "delayed gratification". The expectation of social mobility has sustained many of them during several years of education and deferred responsibilities. In the current economic climate, however, they are increasingly finding that their credentials do not earn the privileges anticipated.(1) The resulting frustrations affect these young people directly. They are, however, much less likely to accept their reduced opportunities than their less privileged peers.(2)

Many young people, after leaving secondary or higher education, have adapted to the deteriorating labour market situation by revising downwards their occupational aspirations for the future. Some are more reluctant to accept this downward revision of aspirations and have reacted instead by moving into new and expanding occupations e.g., in computers and other branches of the information industry.(3) They naturally wish to raise the occupational status of such new jobs and one immediate result of this is that traditional non-graduate routes of entry into these new professions tend to become much less important as a means of recruitment. Thus, most college graduates are likely to maintain a significant advantage in terms of access to higher paying jobs over their less privileged peers. However, other reactions to frustrated aspirations by a minority of better educated young people could have potentially serious social consequences ; growing drug abuse may be one manifestation of this phenomenon.

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1) For example recent American evidence shows that college graduates and persons with less than four years of college are now obtaining less well-paid entry jobs than in the past and are experiencing difficulties in moving up the job ladder. See A.J. Jaffe and Joseph Froomkin, "Occupational Opportunities for College Educated Workers, 1950-1975", Monthly Labor Review, June 1978.

2) M. Lane, "Explaining educational choice", Sociology 6, 1972.

3) I. Berg, Education and Jobs, Harmondsworth : Penguin Books, 1973.

Unemployment among Young Females : In addition to relying on the coping strategies typical to their social class background, girls often react to unemployment by falling back on their more traditional domestic role. Their tolerance of unsatisfactory jobs seems to be increased by their perception of the current situation as a temporary one, which yields them short-term financial benefits to facilitate their future role of wife and mother.(1) Such reactions have led some observers to argue that the traditional female roles cushion the impact of unemployment among these school leavers. Indeed some limited evidence from culturally different societies does seem to support such an interpretation. In Sweden, many girls still state a preference for part-time work so as to minimise conflict with domestic responsibilities. In Australia, many parents are reluctant to see their daughters register as unemployed and, in the absence of adequate employment opportunities, would prefer them to remain longer in education.(2) Finally, in Italy more girls than boys are reported among those who are neither employed, nor in full-time education nor seeking work.(3)

Such evidence could be interpreted to suggest that most young females still have a much weaker labour force attachment than young males.One might then conclude that female unemployment should be regarded as "less of a problem" than the unemployment of young males. There is, however, no convincing evidence available at present to warrant such a strong conclusion.

The fact that young females may tend to cope with unemployment or unsatisfactory jobs by withdrawing more from the labour force than young males does not necessarily mean that they are content with their domesticity. Having the ability to cope does not necessarily diminish the burden of personal suffering and loss of self-esteem, not to mention the loss of current and future earnings, consequent to an unsatisfactory labour market experience. Most young females are aware that marriage is not always a lifelong arrangement and that the probability of having to become a household breadwinner is non-negligible. The mothers of present-day female school leavers are often working women. As models, if not in words, these mothers teach their daughters not to regard work as a temporary interlude.

Such considerations, when combined with the fact that the female share of youth unemployment has been increasing recently in many Member countries, suggest caution before concluding too readily that the costs of unemployment are less for young females than young males.

THE PRIVATE AND SOCIAL COSTS OF YOUTH UNEMPLOYMENT

It is customary to argue that present high youth unemployment involves substantial costs both to the individuals concerned and society at large. However, there

1) Jane Gaskell and Marvin Lazerson, "Between School and Work : Perspectives of Working Class Youth" (mimeo., Faculty of Education, University of British Columbia, 1980).

2) Peter Karmel, Youth, Education and Employment, Australian Association for Research in Education, Radford Memorial Lecture, Melbourne, 9 November 1979.

3) ISFOL-CENSIS, op. cit.

is a great deal of confusion about the nature of these costs and little agreement about their quantitative significance.

The private costs of unemployment, i.e. the costs borne by the unemployed person directly, are generally argued to be the loss of wage and non-wage income. However, the magnitude of these costs depends crucially on the existing tax/transfer system. The income loss will generally be offset to some extent by unemployment benefits. Income replacement ratios (the proportion of the unemployed's net income made up by unemployment benefits) vary widely across Member countries and are heavily dependent on the individual's circumstances. As a rule replacement ratios are much lower for youth, especially teenagers, than for adult unemployed. In addition, eligilibity conditions tend to exclude many of the young unemployed from availing themselves of these transfer payments. However, the income replacement ratio may be a less satisfactory concept for youth as the family is an alternative source of income for them when they are unemployed.(1)

There is also a great deal of uncertainty about the validity of the hypothesis that frequent spells of unemployment among youth give rise to costs which persist over the lifecycle, i.e. the so-called "scarring" effects. As was pointed out in Section III, the basic issues are two-fold : (i) do frequent spells of unemployment and labour force withdrawal, such as experienced by youth, have long-lasting effects in terms of increased incidence of unemployment over the lifecycle and lower wages? and (ii) to what extent do such lifetime effects reflect heterogeneous individual characteristics of the young unemployed as opposed to state dependence ? The empirical evidence on these issues is still very sketchy and capable of several interpretations.(2)

The social costs of unemployment depend on the social opportunity costs of the unemployed youth's time. Here again there is little agreement on the magnitudes involved.(3) At the one extreme some would argue that the social and private costs of youth unemployment are very low since the loss of wage income and non-wage benefits is compensated for by the value of leisure and the information acquired through search activity. On the other hand others would argue that the value of leisure to unemployed youth is very low and that youth typically engage in very little active job search. In addition, there may be significant human capital losses from prolonged spells of youth unemployment as the youth in question miss opportunities for acquiring valuable on-the-job training and work experience. Finally, one needs to

1) See Feldstein and Ellwood, op. cit.. They point out that in their sample about 90 per cent of unemployed male teenagers out of school lived at home with their parents or other relatives. Recent Canadian research indicates that many youth rely heavily on the family as an alternative income source when unemployed.

2) For a review of the available American evidence, see the survey by Kalachek in Annex I.

3) See Martin Feldstein, "The Private and Social Costs of Unemployment", American Economic Review, May 1978.

take account of the oft-expressed view that youth unemployment is associated with serious social problems such as rising crime rates, drug abuse, etc..(1) These social problems may be directly linked to youth unemployment, though the exact causal links are still unclear.

1) While crime appears to be a problem mainly among young males, teenage childbearing appears to have fairly long-lasting negative consequences for young girls. See Sandra L. Hofferth and Kirstin A. Moore, "Early Childbearing and Later Economic Well-Being", American Sociological Review, October 1979.

Annex I

LONGITUDINAL SURVEYS AND THE YOUTH LABOUR MARKET

by

Edward Kalachek
(Washington University, St. Louis)

INTRODUCTION

There has been increased concern in OECD countries with the concentration of unemployment in certain regions and demographic and ethnic groups. In particular, youth unemployment is currently a pressing problem in many countries. Programmes targeted at the youth labour market have been implemented in recent years, and major expansions or modifications are currently under consideration.

The very high unemployment experienced by youth, and the targeting of labour market policies gives rise to a series of important questions : Why is unemployment so concentrated among youth ? Is high youth unemployment a transitory experience for those affected or does it permanently scar ? Will those who experience protracted unemployment while young be particularly prone afterwards to repeat spells of joblessness ? Will their earnings prospects be permanently impaired ? Will tendencies to anti-social behaviour be accentuated ? Alternatively, will subsequent life be substantially unaffected by adverse early labour market experience ? Will government intervention to provide jobs now simply generate some current employment and income or will it have a longer lasting beneficial impact on the careers of those employed?

Such questions cannot be adequately answered using information from periodic cross-sectional surveys or from administrative data which is equivalently cross-sectional. Such statistics provide only moment of time or snapshot measures. They can be regarded as monitoring devices. They can answer questions about level and incidence and can facilitate the identification of problem groups and problem areas. But they were designed to measure and not to explain. However admirably they measure and identify, however useful they are in answering the questions of "what" and "how many", they are of limited usefulness in answering the policy-relevant questions of "why" and "how" and "does it matter".

THE RELEVANCE OF LONGITUDINAL SURVEYS FOR LABOUR MARKET RESEARCH

The examination of processes and of behavioural responses and the isolation of the impact of policy intervention requires longitudinal or panel data.(1) Longitudinal data is information based on two or more interviews with the same sample of individuals, or on collated administrative data collected over time on the same individuals. As a result of the growing micro-orientation and emphasis on sectoral imbalances of public policy, labour market and school-to-work transition panels have proliferated both in the United States and in Europe. They have been designed

1) See Edward Kalachek, "Longitudinal Surveys and Labor Market Analysis",in National Commission on Employment and Unemployment Statistics, Background Paper No. 6, Washington : U.S. Government Printing Office, June 1978.

to facilitate research into behaviour, change and causation ; to provide better insights into how policy intervention affects people and on how people respond. Panels have three major advantages as tools for investigating the youth labour market.

i) They permit a measure of the status stability of particular individuals. Cross-sections can periodically enumerate the number of 16-17 year-olds who are employed or unemployed. They can indicate whether employment or unemployment among this group has remained constant, risen or fallen. Cross-section statistics, however, indicate nothing about the experiences of individual youths. Panel data can indicate the extent to which unemployment experiences are heavily concentrated among small groups of youth who experience quite long durations and the extent to which larger numbers of youth are affected for more modest lengths. They are necessary for estimating the probabilities that different types of youth will enter, remain in or exit from employment or unemployment status, and to determine the number of youths who over any substantial time period will repeat the unemployment experience. Panel data permit the construction of accounting framework tracing the flow of youth between employment, unemployment and out-of-the-labour-force status, or between various occupational, industrial and wage categories. They can, for instance, trace the destination of youth who begin in low-paying activities : how many stay in these activities, how many move to more favoured work, and how many retrogress.

ii) Panels allow us to take account of the fact that current outcomes may be decisively influenced by earlier experiences, choices and attitudes. Panels provide a basis for study of the life cycle process, or of important aspects of this process such as the transition from work to retirement or from school to work. Here they correct a real deficiency since innumerable cross-section studies have conveyed no sense of how teenagers move from one position to another. They have left unexplored the relationship between the current labour market experiences of youth and their subsequent adult performance. To probe this relationship requires panels which monitor youth as they mature, obtaining contemporaneous measures of attitudes and work histories, and ultimately permitting the association of different outcomes with antecedent predictors.

iii) These flows can be related to the characteristics of individuals, activities, the local labour market and the general economy. This will permit a better identification of behavioural responses and hopefully the isolation of crucial variables subject to policy influence. Labour supply studies provide an important case in point. Until recently economists have attempted to infer how individuals alter their labour supply in response to changing opportunities and constraints from cross-section data. Using the cross-sectional dispersion of labour supply, wages and income, they have actually estimated labour supply differences associated with wage and income differences. Such procedures implicitly assume that two individuals differing in wage rates or other income, but otherwise identical in the variables controlled for, will generate the same labour supply responses that a

single individual would generate if he were presented with first one and then another set of wages and income. This seems unrealistic given that included explanatory variables account for only a modest fraction of the total variation in labour supply. Of necessity, cross-section analysis assumes, given controls, that the population is homogeneous, though it is not. Labour supply differences associated in the cross-section with wage and income differences may thus be due to important omitted variables like motivation. In contrast, panels can deal with heterogeneity by identifying individual specific responses due to unobserved individual differences. They can thus estimate how labour supply changes as potential wages and income alter.

The isolation of heterogeneity, so that process, or what is frequently called state or experience dependence, can be observed, is normally a key aspect of longitudinal studies. This disentanglement is also key to public policy concerns since it permits the identification of problem groups and of experiences which create problems. Hence a simple and relevant example will be used to illustrate both the problem and the opportunity. Suppose we observe, after controlling for various characteristics, that people who experience unusually high unemployment at age 18 also experience unusually high unemployment at age 26. We know then that unemployment at young ages portends unemployment at somewhat more mature ages ; something we would not have known without panel data but we do not know why. The key may lie in some characteristic whose measurement has been omitted, say emotional stability or motivation. The population is heterogeneous with respect to emotional stability, and the unstable are prone to unemployment. The other possibility is state or experience dependence -- a long unemployment experience at age 18 may permanently alter an individual in undesirable directions or may alter employer perceptions of him. He may afterwards always be more prone to unemployment. The experience has thus inflicted permanent damage upon him. In regard to this example - which is not atypical - it would not be surprising if heterogeneity and state dependence were both present. Their relative importance would then become the salient issue.

It should be realized that the statistical techniques employed in isolating heterogeneity are complex and indirect and have not received long scrutiny. By the very nature of things the isolation of heterogeneity can at best be proximate. Consequently, results are best received cautiously unless confirmed either by different investigators using different data bodies or even more felicitously by a natural experiment. In this instance, area data offer the best prospects for a natural experiment if there are sufficient observations for areas which differ substantially in unemployment experience during the early but not during the latter phases of the panel. Although these caveats are necessary, it should be emphasized that this type of panel investigation is of the utmost policy relevance. If state dependence is present to any important extent, the cost of unemployment experience to youth may far exceed the current loss of income and may persist for many years. The case for strong aggregate demand or labour market policies to prevent long duration youth unemployment is made considerably more urgent. The uncovering of heterogeneity would call for a different set of policies, emphasizing individual development rather than job creation.

YOUTH LONGITUDINAL FILES : SOME EXAMPLES OF NATIONALLY REPRESENTATIVE STUDIES IN OECD MEMBER COUNTRIES

This section includes a brief description of some of the more relevant and nationally representative special purpose youth longitudinal files. Since the intention is merely to provide some overview, the list of panels is not complete nor is the description of particular panels comprehensive.

The most intensively utilized so far of the American panels are the National Longitudinal Surveys (NLS) of Young Men and Young Women (1) and the National Longitudinal Study of the High School Class of 1972.(2) Both of these panels were sufficiently successful that similar panels are being designed for subsequent cohorts. The NLS is a nationally representative sample of 5000 young men and 5000 young women aged 14-24 at the time of the first interview, with blacks being substantially oversampled. Annual personal interviews were held covering the first 5 years of the NLS, followed by biennial telephone surveys and a 10-year face-to-face interview, then telephone surveys in alternate years with a final 15th year interview scheduled for the 1981-83 period. A rich body of information is collected on work history and current labour market status, wages, hours, family income and assets, health, training, socio-economic background, attitudes and personality characteristics.

The National Longitudinal Study of the High School Class of 1972 is a stratified national probability sample of somewhat more than 20,000 12th graders, with school as the first and students as the second stage sampling unit, and with low income and high minority group enrolment schools over-represented. Data were collected in 1972 at the school sites, with student questionnaires on family background, education, work experience, attitudes and plans ; a brief test of verbal and non-verbal abilities, a counselor questionnaire, and the full high school record. Follow-up surveys of subsequent experience were conducted, primarily by mail, in 1973, 1974, 1976 and 1979.

Britain conducts cohort studies of the health and development of young persons born in 1946 (The National Survey of Health and Development), 1958 (The National Child Development Survey) and 1970.(3) The 1946 cohort study is a longitudinal survey continued through the present of a stratified sample of 5,362 single, legitimate births taking place in Britain between March 3 and 9, 1946. It includes all children born to middle class or agricultural parents and a randomly selected 1 in 4 children born in manual working class families. Some contact was made with the sample at least every two years till age 26. The survey has collected information on educational history, ability and attainment and personality characteristics.

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1) NLS Handbook, Center for Human Resource Research, The Ohio State University, Columbus, Ohio.

2) Center for Educational Research and Evaluation, Research Triangle Institute. National Longitudinal Study of the High School Class of 1972 ; Base Year, First and Second Follow-Up ; Data File Users Manual. Research Triangle Park, North Carolina, July 1976.

3) Nicola Cherry "Persistent Job Changing - Is it a Problem ?" Journal of Occupational Psychology, Vol. 49, 1976, pp. 203-221.

Ability tests and teachers' ratings of behaviour and adjustment were obtained at age 15. A continuous occupational history between the ages of 15 and 25, including each period of employment, unemployment and labour force withdrawal, was assembled by seven interviews or mail questionnaires, and a wide range of occupational, health and income data were obtained at age 26.

In Germany the Longitudinal Study of the Transition of Young People from the Educational System into the Labour Market has sampled by mail 60,000 pupils representative of all 9th grade school classes in general education and 30,000 school leavers from different levels of general education. The survey was first undertaken in 1977, with subsequent waves scheduled for 1979, 1980/81 and 1984/85. Information is being gathered on personality and attitudinal variables, social background, educational and professional plans and career paths, and work histories.

In France the "Enquête Formation-Qualification Professionnelle" has sampled approximately 40,000 persons, including about 2,000 youths aged 15-24, every seven years beginning in 1964. Retrospective information is cotained on family educational and professional background, number of siblings, education degrees, recurrent education and post-school training of respondent, and detailed work history. "L'entrée des jeunes dans la vie active : La génération 1955" is based on school samples for four "départements" of France, chosen to represent different degrees of labour market tightness and school retention rates. The first wave was in 1972, with follow-up waves in 1974 and 1976, all being surveyed by mail questionnaire. Detailed information is obtained on education, personal characteristics and family background as well as on work history, even though the structure of the questions on this item seems not totally adequate to the detailed reconstruction of the work histories. This creates certain difficulties when using the information related to the future experience of the respondent in the labour market.

A number of longitudinal studies of the unemployed have been conducted, are underway, or are in the planning stage. Notable examples are the German Longitudinal Study on the Causes and Consequences of Unemployment, and the study of French registered unemployed of January 1974 by the Agence nationale pour l'Emploi (ANPE). Both the advantages and limitations of such panels should be recognized. They are particularly useful in differentiating between the characteristics and search tactics of quick and slow job finders. The information they generate can be used to determine how the intensity of job search, the receipt of unemployment benefits and recourse to various government counselling and job finding services, affect the duration of unemployment. However, the panels survey only the registered unemployed. They thus do not provide a basis for inferring susceptibility to unemployment. This would require a sample of both the unemployed and the employed. Further, panel length is under two and a half years, too short a period to determine the impact of a long duration unemployment experience on subsequent labour market performance.

TYPES OF CURRENT LONGITUDINAL RESEARCH OF THE YOUTH LABOUR MARKET AND MAIN RESEARCH RESULTS

The type of longitudinal analysis which is currently illuminating the dynamics of the transition from school to work and providing policy relevant results has been produced mainly, though certainly not exclusively, by researchers using data on the American labour markets. The vitality of the American research seems traceable in uncertain proportions to three causes : access of researchers to the data ; existence of research interests ; and the availability of appropriate data.

After a break in period during which longitudinal data were not widely exploited, public use tapes of the various waves of longitudinal studies in the United States have been made available to researchers relatively soon after the completion of the wave and at rather nominal cost. For example, the National Longitudinal Survey of Young Men and Young Women now produces a well processed, "cleaned-up" and documented tape which can, with minimal additional effort, be used for multivariate analysis. The importance of access by the general research community cannot be overemphasized. Some of the most important advances have been made by researchers working outside the government agency or research team responsible for the longitudional survey.

Labour economists and econometricians have conducted an appreciable portion of the relevant research in the United States, as would be expected given the many important economic aspects of the school-to-work transition. Similar research involvement is not apparent in Europe despite the similar policy relevance of the economics of the youth labour market. It can be safely said that most published European work is descriptive rather than analytic. Neither the tools of modern labour economics nor the more sophisticated and powerful statistical techniques are utilised. As a result, what emerges is localised fact rather than an understanding of process. On the other hand, the research of a British occupational psychologist, Nicola Cherry, on the determinants and aftermath of high teenage job turnover rates represents both a major contribution to the understanding of youth job mobility and an excellent illustration of the potential of longitudinal research.(1)

The major American panels have been based on nationally representative samples. The size of the sample has normally been rather modest but a rich set of information has been collected on individual characteristics and family background and a detailed record has been assembled of the individual history of wages, hours, employment, unemployment and out-of-the-labour-force status.

The data has been sufficient to permit useful and reliable inferences about the relationship between individual characteristics, attitudes and experiences and subsequent outcomes. Survey questionnaires, while drawing on the current state of knowledge in the various disciplines, have still had an exploratory character. They were based on a recognition that our knowledge of labour market dynamics and of the school-to-work transition was primitive and hence sought to provide a rich mosaic of this process. These points merit repetition. Panels are most felicitous for measuring individual changes and for inferring the determinants of individual

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1) See Cherry, ibid.

responses and development paths given different experiences and stimuli, but they can do so only if there are adequate controls. Panels consequently require both rich measures of individual characteristics and background at the start of the survey period and comprehensive measures of individual behaviour, experience and development during the period. The emphasis is on the individual. Some European panels are motivated by the legitimate planning needs of educational and other authorities, and hence tend to emphasize group outcomes. Panels are not necessary for such purposes ; for example, the attainments of classes graduating at different educational levels can be adequately ascertained from cross-section surveys.

The major findings of recent longitudional research on the youth labour market are summarised below, both to indicate the potential of this type of research and for their policy relevance.

Researchers using both longitudinal and cross-sectional data are increasingly dubious about the merits of the unemployment rate as a measure of supply-demand balance in the youth labour market.(1) At the very least, the unemployment rate measure should be supplemented by attention to the employment to population and the employment plus school attendance to population ratios. There are numerous reasons for discontent with the unemployment rate. As a youth cohort ages, its employment to population ratio can alter greatly without inducing noticeable or even consistent changes in its unemployment rate. Weeks worked seems consistently to be a more precise predictor of subsequent labour market outcomes than does weeks unemployed. Most fundamentally, the survey questions which distinguish unemployment status from out-of-the-labour-force status with reasonable precision for adults do not perform equally well for youth. There is a continuous and large monthly flow between the labour force and out-of-the-labour-force. Clark and Summers report that almost 15 per cent of male teenagers leave the labour force each month as compared with 1.3 per cent among mature men. The magnitude of these flows can be taken with several grains of salt since gross flows are greatly magnified by response error, and response error can be expected to be greatest for youth. Still, there undoubtedly is a considerable amount of true status changing ; and the difference between out-of-the-labour-force and unemployment status may be somewhat ephemeral for youth. Thus, Clark and Summers report a monthly transition probability for male youth of 32 percent between unemployment and employment and of 22 per cent between out-of-the-labour-force and employment. The difference is surprisingly small. The interpretation of these facts is controversial. Clark and Summers hypothesize that non-labour force participation is due to discouragement ; and hence that non-employment is a better measure of job seeking than is unemployment.(2) Most other analysts maintain that the preponderant majority of out-of-the-labour-force youth are engaged

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1) See for example Kim Clark and Lawrence Summers, "The Dynamics of Youth Unemployment" ; David Ellwood, "Teenage Unemployment : Permanent Scars or Temporary Blemishes" ; and Michael Wachter and Choongsoo Kim, "Time Series Changes in Youth Joblessness". These three papers are all published in Richard B. Freeman and David Wise (eds.), National Bureau of Economic Research Conference on Youth Unemployment (forthcoming).

2) Kim Clark and Lawrence Summers, "The Dynamics of Youth Unemployment", (ibid.).

in socially and personally legitimate activities.(1) Responses to survey questions suggest that only a small minority are at the moment interested in employment. Further, the frequent changes in status are indicative of weak labour force attachment. This suggests that the advantages of market and non-market activities are about equal for many youth, with the balance veering toward market work some months and toward non-market activities in others.

For most youth the American labour market functions rather well. One half of the job changes among teenagers occur without an intervening spell of unemployment. Two-thirds of the entrances into employment occur without a measured spell of unemployment. Most of those who experience unemployment do so for rather brief periods.Seventy per cent of the young men who become unemployed are no longer so within one month. Average job tenure of course is also short. The average duration of employment status is 4 months for an in-school teenager and 9 months for an out-of-school teenager. Since workers can change jobs while still remaining in an employed status, the average duration of a job may be only half as long as this.(2) However, high job turnover rates do not appear due to market defects or pathologies. Thus, Becker and Hills (3) find that the numerous spells of unemployment which can be expected to accompany high job turnover positively influence subsequent wages, though duration of unemployment has a negative impact. Earlier work by Nicola Cherry, using British data, found little relationship between job turnover rates among youth and their subsequent earnings level. Interestingly, predetermined variables, specifically school attendance rates, tractability, ability and birth rank were predictors of interpersonal differences in job turnover rates. Further, those with high turnover rates between the ages of 15 and 18 experienced more personal and social problems between the ages of 18 and 25. High job turnover rates may thus be associated with personal rather than market pathology.(4) Finally. Jovanovic and Mincer (5) and Leighton and Mincer (6) show that job turnover rates are primarily a function of job tenure, being high when tenure is short and declining rapidly as tenure lengthens. Young school leavers necessarily have shorter job tenure than older men and hence higher job turnover rates. The short tenure level of the young is shown to be the main reason for the age differential in the incidence of unemployment.

Alongside the finding that the labour market functions well for most youth must be placed the finding that a minority of youth apparently heavily composed of the less well educated and the black, do rather poorly. Thus, both Clark and Summers and Feldstein and Ellwood show that in 1975 the unemployment of male school leavers

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1) See, for example, Wachter and Kim (op. cit.).

2) Clark and Summers, (op. cit.).

3) Brian Becker and Stephen Hills, "The Long-run Effects of Teenage Unemployment : Some Preliminary Results" Paper presented at the Industrial Relations Research Association, August 29-30, 1978, Chicago, Illinois.

4) Cherry (op. cit.).

5) Boyan Jovanovic and Jacob Mincer, "Labor Mobility and Wages", National Bureau of Economic Research, Working Paper No. 357, 1979.

6) Linda Leighton and Jacob Mincer, "Labor Turnover and Youth Unemployment", in Freeman and Wise (eds.), (op. cit.).

was heavily concentrated among a small group who had experienced persistent joblessness. Fifty-five per cent of unemployment was accounted for by the 8.4 per cent of the population which during the year had experienced 6 months or more of unemployment.(1) This is an important finding which seems to suggest the need for research and policy initiatives highly targeted on a small group of youths with problems. However, the United States was recovering from a recession during most of 1975 and the overall unemployment rate was 8.5 per cent. During such periods the duration of unemployment is typically quite high, and protacted spells of joblessness for particular individuals are not necessarily indicative of more fundamental personal or labour market problems. Thus, in an analysis of the year 1974, when the overall unemployment rate was considerably lower (5.6 per cent), Clark and Summers found teenage unemployment spells to be considerably shorter, both absolutely and relative to adults. Male teenagers with unemployment durations of 6 months or longer accounted for 11 per cent of male teenage unemployment. The comparable percentages for male adults, female teenagers and female adults are respectively 28, 9 and 18 per cent.(2) While this suggests undue concentration of teenage unemployment only during periods of significant economic slack, there are other indications of heterogeneity in the youth labour force. The normal set of demographic, educational, social and family background controls used in cross-sectional analysis do not take adequate account of interpersonal differences. Thus, Meyer and Wise find strong evidence that the number of hours worked while in high school significantly affects both hours worked and wages earned upon graduation. This relationship does not appear to be capturing the favourable impact of experience on earnings, and the number of hours worked in high school is not strongly related to other measures of background or achievement but appears to be an independent personal characteristic.(3)

Adverse labour market experience appears to persist. Those most prone to early unemployment are also most prone in their twenties. The vital question then becomes: Does the fault lie with a relatively unchanging set of personal characteristics which create a particular vulnerability to unemployment, or does unemployment beget unemployment ? Do early spells of unemployment alter individuals or how are they perceived by employers in such a way as to make them afterwards ever more susceptible to unemployment ? Primarily heterogeneity appears responsible for persistence. There is also some state dependence but it is of a mild nature, hardly indicative of early unemployment setting off a vicious lifetime spiral of further unemployment. Thus, Meyer and Wise find that the number of weeks worked in any year after graduation significantly affects the number of weeks worked in the subsequent year. However, the effect dies out rather rapidly, and the relationship between weeks worked in

1) Kim Clark and Lawrence Summers, "The Dynamics of Youth Unemployment", (op.cit.) and Martin Feldstein and David Ellwood, "Teenage Unemployment : What is the Problem ?" National Bureau of Economic Research, 1979.

2) Kim Clark and Lawrence Summers, "Labor Market Dynamics and Unemployment : A Reconsideration", Brookings Papers on Economic Activity, 1, 1979.

3) Robert Meyer and David Wise, "High School Preparation and Early Labor Force Experience", in Freeman and Wise (eds.) (op. cit.).

in the first and fourth years is modest.(1) Ellwood finds, after correction for heterogeneity, that a 26-week spell of unemployment will increase unemployment two years later by two weeks. Persons who work an extra thirty weeks one year will work an additional four weeks the next as a result of this experience.(2) As a further indication that the luck of the draw in the early school leaving period is not decisive for later events, Meyer and Wise find that unusually high or unusually low wages in the year after graduation have little relationship to wages four years later.

Experience increases with the number of weeks worked. Unemployment, by reducing weeks worked reduces experience and hence results in lower wages. This appears to be the most important channel by which early unemployment affects subsequent experience. Antos and Mellow estimate that a year spent out of the labour force but not in schooling or training would cost an 18-year-old 14 cents and a 24-year-old 21 cents an hour in wages being lower than they otherwise would have been next year.(3) Meyer and Wise find that a year of experience during the first year after graduation is associated with a 13 per cent increase in wages in the second time period, but that this rapidly declines to 10 per cent in the third period, 6 per cent in the fourth and 4 per cent in the fifth period. Ellwood finds that a year's work experience in the period soon after leaving school increases wages by 10-20 per cent but is not able effectively to test for whether those who miss this experience are subsequently able to catch up.

ARE THE RESEARCH RESULTS FOR THE AMERICAN YOUTH LABOUR MARKET RELEVANT FOR EUROPE ?

Longitudinal research on the American youth labour market has been quite recent. The flaws and limitations of the methodologies used have not yet been thoroughly investigated. The results of different studies are not always fully consistent, and generally they have not been fully reconciled or substantiated with studies on other time periods and data bodies. Given these caveats, there are a number of important findings which substantially advance our hitherto minuscule knowledge of labour market dynamics, and have considerable policy relevance. In particular, the findings provide support for policy programmes closely targeted to groups of problem youth and designed to provide them with work experience. Early protacted experiences of joblessness do not permanently mar. But they are associated with somewhat more unemployment subsequently and the loss of experience does reduce earnings significantly. The losses endure at least for some years, though it is not yet clear whether they are permanent. In any event the random distribution among teenagers of long spells of unemployment due to deficient demand is a clear inequity. Those who

1) Robert Meyer and David Wise, "High School Preparation and Early Labor Force Experience (Ibid.)

2) David Ellwood, "Teenage Unemployment" : Permanent Scars or Temporary Blemishes", (op.cit.).

3) Joseph Antos and Wesley Mellow, "The Youth Labor Market : A Dynamic Overview", U.S. Department of Labor, Bureau of Labor Statistics, BLS Staff Paper 11, 1979.

obtain scarce work experience now have jobs in the present and higher income subsequently. Those denied work experience are unemployed now and afterwards earn lower incomes. This suggests that the emphasis of youth labour market policy should not be exaggeratedly placed on the immediate transition from school to work. Measures to prevent long involuntary spells of joblessness among youth who have been out of school for two or three years may be equally important.

Comparable research using European data would be required to fully establish the applicability of these results to European youth. In the absence of such research, a keen sense of judgement must govern the application of American findings to European circumstances. The similarities between American and European youth labour markets are pronounced but then so are the differences. American youth stay in school longer. They are becoming more vocationally or professionally oriented in their educational choices, but they may still regard these choices and their first post-school job as providing them with a lottery ticket for future experience,while Europeans may think more in terms of a stable lifetime career. Given the importance of school-related occupational training in many European countries, the prestige of the school degree, and its impact on placement and subsequent opportunities, job experience may be far less important as a determinant of wages than in the United States. The art of projecting employment by occupation and using it as input for vocational guidance, counseling and educational planning is well developed in the United States, but the school system is highly decentralized, and certainly does not engage in coordinated planning aimed at synchronizing the future flow of supply to expected demand. Perhaps most importantly over the past decade the American economy has fluctuated cyclically around a full employment growth path, sometimes exhibiting overfull and sometimes underfull employment. This at least is the view of the preponderance of American economists who regard the full employment/unemployment rate as having shifted up to the 5.5 - 6.0 per cent range. During the 1960s and early 1970s there was a substantial increase in the size of the youth cohort. It was accompanied by a sharp decline in relative youth wages and a major expansion in youth employment. Still youth unemployment rates rose and persisted at high levels at full employment. Youth unemployment rates were substantially higher than those in earlier prosperity periods. This is the background to American research and policy efforts. They have been motivated by the questions : Is there something wrong with the structure of the youth labour market ? Is something pathological occurring ? Is it possible that there is excess supply in this labour market and full employment in all others ? If so, does responsibility lie with the minimum wage and the extension of its coverage ? Is it that the size of the youth cohort has expanded greatly, and demand has adjusted only with substantial lag ? Is the problem traceable to high turnover rates among youth ?

The European situation is palpably different in that high youth unemployment has coincided both with the demographic explosion and with the development of considerable slack in most European economies. The cyclical sensitivity of youth employment and unemployment is well documented and well understood. Most adults have jobs. They remain employed unless they lose or leave these jobs. In contrast, youth like any other new entrants are perched in the ante-room of the labour market. They are

invited in and obtain employment rapidly if firms are expanding jobs, and more slowly if the number of jobs are constant, but there is a need to replace workers who die, retire or move on. On the other hand, if employers have all the workers they need, youth remain unemployed. A persistent deficiency in aggregate demand ultimately falls most heavily upon labour market entrants. The European situation is certainly not unambiguous. There was a positive time trend in youth unemployment in many European countries prior to the 1973-74 recession. Since then, youth unemployment seems to have risen relative to adult rates. Still the current high youth unemployment in Europe provides no cause for the types of concern about structure which became so pronounced in the United States when youth rates remained high under full employment circumstances.

On the other hand, one response to economic slack in Europe has been an effort through both collective bargaining and governmental legislation to increase the job security of the currently employed. When successful, these efforts tend to improve the adult and worsen the youth employment situation in the here and now. They perhaps, more importantly, have an effect which transcends the present. Strengthening the commitment of an employer to his workforce increases permanently the cost to him of hiring a new employee. It will make the employer more cautious about hiring new workers, more insistent on effective screens and on strong signals of stability and competence. The age at which workers will be hired by the more sought-after employers, those able to pick and choose, will tend to rise. There is thus some danger of permanently worsening the labour market for youth ; of creating a situation where 16 and 17 year-old youth must mill around for some time in transitory jobs which provide little opportunity for training and advancement, and which thus encourage some lightfootedness, while waiting for the age and experience level at which they will be seriously considered by employers who have wage and career ladders to offer.

LIMITATIONS OF LONGITUDINAL STUDIES

The power of longitudinal analysis has received considerable attention in the paragraphs above and is further elaborated on in the Appendix (p. 96). Such emphasis is more than warranted. Panels afford major opportunities for examining processes and behavioural responses and for clarifying policy relevant issues. When skilfully constructed and analysed, they will permit quantum jumps in our knowledge of the functioning of the youth labour market. The most important recent research on youth employment and unemployment has been based on panel data, and there is every reason to anticipate that this will continue to be the case. Still, despite its many merits, panel data will not provide unequivocal or speedy answers to many of the questions posed by policy-makers. Like all data, it has defects and limitations, some of which have yet to be fully explored :

i) The construction of a panel is an act of investment. Long disciplined and imaginative effort must be devoted to the design of questionnaires. The effort occurs now ; the benefits are reaped many years later. Thus, important results are just beginning to emerge from the National Longitudinal Study

of the High School Class of 1972. Very considerable information can be obtained from panels whose first wave consists of respondents aged 14 or over. An investigation of some of the more fundamental questions, however, may require panels commencing at birth. Here the gestation period will indeed be long.

ii) The attrition problem and the biases it introduces require considerably more research. Maintaining contact with respondents and sustaining motivation is not a trivial problem in long-lived panels. Those lost from the panel by attrition may differ in important respects from those remaining in it. It is important to determine how long a panel can continue before attrition results in overly severe population bias, the extent to which this depends on the group being surveyed, and the efficacy of cash payments in holding attrition to reasonable levels.

iii) No one panel will be a rich enough repository to answer all research needs. In the course of a panel new hypotheses may arise, generated by panel studies or advances elsewhere or by new public policy problems. Testing these hypotheses may require anterior data which has not been collected because its importance was not foreseen. Panel studies on one cohort of youth will answer some questions but raise others which will be most effectively addressed by panel studies on the next cohort of youth. Any cohort can be most effectively studied by a portfolio of panels rather than by a single panel. In particular, the study of psychological and attitudinal factors during a developmental sequence may require observation and experimental techniques open to unanticipated aspects of, or changes in, the environment. This may best be accomplished in small, intensive and reasonably unstructured panels rather than in larger, more structured ones.

iv) There is always some danger that repeated interviewing will result in panel bias. This clearly occurs, as discussed in the appendix (see page 98), in surveys like CPS which re-interview monthly. However, there is so far little evidence of its seriousness in panels which re-interview annually or even less frequently.

Longitudinal studies are limited by reliance on the individual respondent. He frequently does not know or is not a reliable source for much-needed information. Thus, the impact of educational experiences on subsequent labour market outcomes is not likely to be adequately discerned by a study which relies, for information, solely on student responses to survey questions. Likewise, the extent to which high youth turnover rates reflect independent decisions by youth and the extent to which they reflect employer policy is not likely to be adequately discerned by a study which relies on uncorroborated individual subjective judgements. The American National Longitudinal Survey of the High School Class of 1972 is an excellent example of how a panel can deal with some of these problems by going beyond normal survey techniques and collecting other types of information and information from other sources. In addition to the regular questionnaire, this panel asked each student to complete a 69-minute-test book measuring both verbal and non-verbal ability. Data were also obtained from the student's School Record Information Form on high school curriculum,

grade point average, credit hours in major courses and, if applicable,his or her position in ability groupings, remedial instruction record, involvement in certain federally-supported programmes, and scores on standardized tests. Finally, information from a School Questionnaire and from one or two Counselor Questionnaires were also obtained for each participating high school. This match of information from students and schools should serve as a model for a match of information on youth workers and their employers. The absence of such a match is the major omission in panel data. There is simply no information on the size of the establishment and firm, or on its turnover rates, wage level, occupational composition and production processes. The panels view the labour market solely through information gathered from workers. However, understanding labour market actions and outcomes requires information on the work site as well as on the worker. Some work site information could be obtained by adding relevant questions to existing surveys,but other information will require responses by the employer and by other workers. What is needed is a two stage probability sample in which establishments are the first stage and workers the second stage sampling unit.

Appendix

RETROSPECTIVE STUDIES AND CONVERSION OF LABOUR MARKET SURVEYS FOR PURPOSES OF LONGITUDINAL RESEARCH

Note that measures of change over time can be obtained from recall or retrospective as well as from longitudinal studies, and at considerably lower costs. The distinction between the two types of studies is somewhat blurred. Of practical necessity, most longitudinal data contain heavy doses of retrospection. Respondents cannot be interviewed continuously and, hence, are normally called upon to recall events which have occurred since the last survey. Still there is a distinction. Recall data cannot provide adequate measures of attitudes before the fact. They must suffer from the fallibility of human memory, the fact that the respondent may censor events he mistakenly regards as trivial, and the human tendency towards ex-post facto rationalization. The longer the period over which an individual is asked to recall, the less likely it is that short periods of employment and unemployment, hours, wages and income will be accurately reported. Given that little is known about the comparative accuracy of panel and recall studies, the optimal choice between either source must be regarded as a matter of judgement, depending on the availability of funds and the subject being researched. In studying the transition from school to work, early attitudes and detailed work histories which incorporate the large number of changes in jobs, wages and labour market status which may occur seem vital. This establishes a strong judgemental case for panels which re-interview at fairly frequent intervals.

While longitudinal data has unique advantages as a tool for investigating the youth labour market, cross-section data are indispensable for monitoring purposes. Cross-section and longitudinal data are complementary rather than competitive sources of information. Further, each wave of a panel constitutes a cross-section, and many cross-section surveys, including periodic labour force surveys and population censuses, do re-interview the same persons. They can be converted to panels by the simple expedient of matching observations over time.(1)

For example, the American Current Population Survey (CPS) is a cross-section survey but its sampling format, adopted for cost and consistency reasons, felicitously creates panels of modest duration. Each sample contains 8 systematic subsamples or rotation groups, the members of which are interviewed 8 separate times. They are in the sample for 4 consecutive months, are dropped for 8 months, and

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1) For further development of these points, see Edward Kalachek, "Longitudinal Surveys and Labor Market Analysis", (op. cit.).

return for the same 4 calendar months of the next year. This procedure results in a very substantial sample overlap. Seventy-five per cent of the sample is common from month to month and fifty per cent from year to year.

In France the Enquête Emploi surveys the labour force status of 50,000 individuals including several thousand young school leavers twice a year with each respondent being interviewed three times. In Norway respondents are interviewed at four different moments of time during a six-quarter period.Canada interviews labour force respondents for 6 consecutive months, and is in the process of developing flow statistics over a 6-month period. Denmark and Finland also interview the same respondent more than once and Finland is generating some flow statistics.(1)

In all these cases, the overlap in observations between surveys permits a quantification of the change in status of individuals between periods. It is thus possible at very minimal costs to generate modest length panels highly suitable for short-term labour market analysis. These panels are complementary to the longer-lived special purpose panels, having a different set of advantages and of disadvantages.

The overlap between observations in labour force surveys can and has been used for two separate purposes. First, a gross flows or gross changes accounting system can be constructed for any two or more months of the rotation group sequence. The following table illustrates how gross flow statistics can be used to compare the labour force status of persons in a given month t with their status in an earlier month (t-n) (symbol E = employed, U = unemployed and O = out of the labour force). The first symbol in a pair represents status in month (t-n) and the second status in month t. Thus, reading down column 1 we can trace the flows by which individuals arrived at employment in month t, from employment, unemployment and out of the labour force respectively in month (t-n).

HYPOTHETICAL GROSS FLOWS MATRIX

Labour Force Status Month t

Labour Force Status Month t-n	Employed	Unemployed	Out of the Labour Force
Employed	EE_t	EU_t	EO_t
Unemployed	UE_t	UU_t	UO_t
Out of the Labour Force	OE_t	OU_t	OO_t

1) Population censuses also afford another important, though so far unexploited opportunity, for observing the same individual at different stages of his life. However, Norway and Great Britain are taking a major step forward by matching individual observations from different censuses.

Second, a library of matched tapes can be created preferably for public use. This simply involves identifying responses of the identical individual in the months to be matched and then merging observations on to a single tape. Matching involves some dexterity in developing procedures for identifying identical respondents, but these procedures have been successfully developed in Canada, Finland and the United States. Whether gross flows matrices or matched tapes are to be developed, the data sources and the possibilities for matches are the same. The difference is in the use. The justification of matched tapes is analytic ; they will facilitate research on labour market behaviour. They can be used to investigate the determinants of labour force entry or exit or of the duration of unemployment or of occupational and industrial mobility or the sources of seasonal employment change. The interest in gross flows matrices is topical rather than analytic. The matrices will help mainly in interpreting the significance of month-to-month and year-to-year changes in employment, unemployment and labour force participation.

Matched tapes suffer from a number of technical problems which they share in lesser or greater degree with other panels. First, there may be a high attrition rate among persons who change residences or geographic areas ; indeed, the attrition rate will be 100 per cent in surveys which, like CPS, sample addresses or housing units rather than households. This will bias the sample since movers and non-movers differ in age, education, marital status and other characteristics.Second individuals or their responses are frequently mis-classified. These errors will tend to offset and should not significantly affect the totals or net changes reported for employment, unemployment and out of the labour force. However, in computing gross flows errors cumulate rather than offset. A person unemployed in both comparison months but erroneously reported as out of the labour force in the first month and correctly reported as unemployed in the second month would appear in the OU cell in the gross flows matrix. A person out of the labour force in both months but erroneously reported as unemployed in the first would appear in the UO cell. This incorrect reporting of gross changes conceivably could be counterbalanced by individuals habitually reporting the same status even though their true status had altered. Otherwise, gross change data are upward biased, compounding actual status changes with the misreporting of status in one of the comparison months. Third, at least in countries like the United States and Canada, where the respondent is re-interviewed over short-time intervals, there is the related problem of rotation group or panel bias. Respondents are often inconsistent in their replies to survey questions when re-interviewed even though the questions deal with an objective and unchanging fact. Being interviewed once either improves the respondent's understanding of the question or alters his state of mind so that he subsequently provides a different answer. In particular, unemployment and some types of marginal employment are substantially higher in the first month of interview than otherwise. Assuming that latter month responses are more accurate, rotation group bias results in an exaggeration of the number of unemployed and marginally employed workers leaving the labour force.

The attrition of movers is perhaps the most serious of these problems. It can either be solved at some expense by following respondents to their new residences and interviewing them there. Alternatively, the gross flows subfile will be a

biased sample of the total population. This will create estimation problems only when there is interaction between the explanatory variables and variables associated with differential attrition in their effect on the dependent variable. If so, analysts will need to utilize a two-stage estimating process ; estimating the probability of being observed in the sample in the first stage, and using this probability to control for potential bias in the explanatory variables in the second stage. As for response error, its major effect will simply be to increase standard errors, lower R^2, and give the unwary an exaggerated impression of labour market flexibility. Early work suggests that the use of dichotomous variables as controls for different rotation groups may considerably alleviate the distortions caused by rotation group bias.

The technical objections to utilizing recurrent labour force surveys as longitudinal files are not decisive, but these surveys do have other limitations. Their maximum length is simply too short for the monitoring and analysis of many processes. The number of questions asked is limited compared to the richness of information gathered by the special panels : hence the analytic potential is also limited. The information generated by recurrent labour force surveys could be expanded significantly by occasionally asking additional questions. CPS periodically does this through special supplements whose analytic usefulness has already been demonstrated. Thus, the special supplement on job search techniques, when matched to subsequent months, permitted analysts to determine the impact of different methods of search and of the receipt of unemployment compensation on the subsequent length of unemployment.(1) There is a real but not unlimited opportunity here. The danger of high refusal rates is always present in recurrent surveys and places a premium on relatively short questionnaires. Further, some care must be taken that additional questions do not influence answers to the current status questions. Higher reported employment or unemployment should, sampling error aside, reflect higher employment or unemployment rather than noise introduced by supplemental questions.

The short life of the panel and the limitation on questions means recurrent labour force surveys must be viewed as a complement rather than as a substitute for longer special purpose panels. As a complement, they have the major advantages of full population coverage, historical records, cost and timeliness. The size of the sample of youth in recurrent surveys may greatly exceed or fall short of the size of special youth panels. This will vary from country to country. In any case, it is advantageous to be able to compare youth to adult responses. Such comparisons are an important means for determining whether or not there are special youth problems. In those countries where records of earlier labour force surveys are available for earlier years, it may be possible to generate a vast repository of microdata susceptible to pooled time series - cross-section analysis.

Then there is the cost element. Longitudinal data from recurrent labour force surveys would not be free. There would be research expenditures to investigate and compensate for biases, processing costs and incremental costs for special supplements.

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1) John Barron and Wesley Mellow, "Search Choices and Changes in Labor Force Status Among the Unemployed", mimeo, 1978.

However, the costs of designing, implementing and maintaining surveys would not have to be incurred. Hence, longitudinal information could be obtained at a very minimal cost.

For policy-makers, there is the unique advantage of timeliness. Conducted periodically, they can provide a continuing current flow of information on labour market dynamics. The importance of the special questions cannot be exaggerated. They open opportunities for the timely investigation of policy questions of pressing importance. Interesting and provocative work has already been done in the United States using CPS matched data on the occupational mobility of the disadvantaged,(1) the stability of the poverty population (2), the cyclical sensitivity of the female labour force (3), and in simulating the demographic composition of employment and unemployment.(4)

Panels based on recurrent labour force surveys are an ideal instrument for investigating unemployment, job turnover and other problems of short-run labour force dynamics. We still know surprisingly little about the forces which determine total unemployment and its incidence. How important is the seasonality of industry ? How important are industry specific cycles ? How important is tight production management by individual firms ; closing down for a few days whenever production outstrips sales ? How important is the "floater" personality, the individual who finds jobs but is frequently unemployed because he frequently quits or is laid off? Likewise, we know very little about the in and out of the labour force activities of marginally attached teenagers, women and older persons. How do the jobs held by teenagers alter as they move through school ? How do they alter as they move from the last year of school to full-time employment ? What happens to wages along this time path ? Short and repeated interviews every month, quarter or half year over a period of one to two years are a superior means for obtaining formation about these important topics than are long but infrequent interviews.

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1) Lawrence Slifman, "Job Mobility and Labor Demand", Industrial Relations, Vol. 5 (May 1976).

2) Terence F. Kelly, "The Creation of Longitudinal Data from Cross-Section Surveys, An Illustration from the Current Population Survey", Annals of Economic and Social Measurement, 2/2, 1973.

3) Stuart Altman, "Factors Affecting Unemployment of Married Women. A Study of the Dynamics of the Labor Force Behavior of Secondary Family Workers". Unpublished doctoral dissertation, University of California - Los Angeles, 1964.

4) Ralph Smith, "A Simulation Model of the Demographic Composition or Employment, Unemployment and Labor Force Participation". in Ronald Ehrenberg, (ed.), Research in Labor Economics, Vol. 1, 1977.

Annex II

INVENTORY OF SPECIAL MEASURES FOR YOUNG PEOPLE

INTRODUCTION

This inventory has been prepared to inform readers of the different measures being taken by Member countries for young people. It has been drawn from the replies sent in by countries in response to the Secretariat's request for information together with other material available to the Secretariat. In general the information is that available as at 31 December 1979 updated by some countries up to 30 June 1980. Measures are grouped under the following headings : Employment ; Education ; Vocational Education, Training and Work Experience; Employment Compensation and Welfare Assistance ; Innovations and New Strategies.

1. Employment

Under this heading we wish to consider a variety of means, some of which at least have been used in all but two of the countries for which information has been made available.(1) These means can, for the purposes of this annex, be conveniently divided into a number of subordinate categories depending on whether new jobs are being created or not, whether they are essentially temporary or indefinite or long-term in duration and whether they are in the public or private sector.

The first subdivision therefore is concerned with whether measures are intended to lead to the creation of new jobs specially for young people or whether the measures are designed to improve the operation of the employment service for young people to improve their chances of being engaged in the jobs which are continually being created or become vacant spontaneously. This latter aspect must be distinguished from the separate category of measures to improve the work experience and stock of skills of young people, which is dealt with in Section 3 below. That is a measure directed towards the supply side of the labour market ; here we are primarily concerned with measures bearing on the demand side, together with measures to improve the functioning of the labour market.

As regards the latter it can be noted that public employment services generally tend to handle a higher proportion of less skilled and poorly-paid jobs than they do of more skilled and more highly-paid jobs. Apart from Japan and Canada, employment

1) These countries are : Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Japan, the Netherlands, New Zealand, Norway, Spain, Sweden, Switzerland, United Kingdom and United States.

services have generally handled less than half the initial placements of school leavers. In Japan, the lifetime employment system has operated under which employers submit their hiring plans well in advance to the Public Employment Security Offices (PESOs) which are then able to help pupils select from an extensive range of job openings well before the time when they leave school. This has resulted in the PESOs making an average of about one million initial placements a year. Whilst it is an oversimplification to say that the lifetime employment system prevents the emergence of severe youth unemployment, it has been a contributory factor in the relatively favourable development of youth unemployment in this country. It should also be noted that the seniority wage system, under which young people start by earning relatively low salaries, has been a major factor.(1)

In Canada, there is a different tradition with more visible mobility as persons switch jobs between firms rather than within the firm as in the Japanese model. There is also a tradition of summer jobs during vacation periods for both work experience and income-raising reasons. It is estimated that three-quarters of all job-seekers use the employment service offices. Surveys show that those placed by the service tend to be more satisfied with their jobs than those who found jobs on their own although registered with it. As regards students, there is a special series of 363 employment service offices (Canada Employment Centres for Students) operated by graduate and student assistants during the five months April to August. The centres plan and promote student hiring campaigns, canvass for summer jobs and refer suitable students to fill them (the target for 1980 is 311,000 placings ; 293,000 achieved in 1979). Since their inception in 1968, the centres have been evaluated each year. It has been concluded that their efficiency and effectiveness have improved steadily due to more experience with the concept, more staff training and more aggressive student hiring campaigns (e.g. advertising). Participants gain work experience and increased knowledge of the conditions and requirements of the Canadian labour market, thus facilitating eventual transition from education to work.

Australia has special offices of the Commonwealth Employment Service, the Youth Job Centres and Careers Reference Centres in each state capital, plus some major regional centres. The first provide a specialist placement service helping young people apply for vacancies and canvassing employers on their behalf. The second provide written and audio-visual material on a range of professional to semi-skilled occupations to help orient young people thinking of entering the labour market. There has also been an on-going programme of modernization of the service provided by the CES, including self-service matching more fully to meet the needs of unemployed persons.

Denmark has reported a measure to improve the range and quality of the employment services for young people through increased powers to local authorities in co-operation with the employment service, schools and local health and social security

1) In a report on "The Japanese Employment System" (published by the Japan Institute of Labour, 1980) the author, Professor Haruo Shimada, points out that in 1977 24 per cent of all engagements by firms with 5 or more workers were new school leavers, 24 per cent were other inexperienced workers and 52 per cent were "half-way" (or mature) workers.

administrations. In addition to being better equipped to provide information about employment conditions and education, local authorities should be able to help solve practical problems for individuals, provide meeting places for young people, study their education and employment conditions and expectations. It is noted that young unemployed persons can be involved in providing this expanded service.

A number of countries have increased the resources devoted to the placement service for young people. For example, Finland has reported the appointment of 52 new offices for youth placement advisors. France has continued to develop both placement and guidance and information services for young people. Norway has also reported an expansion and consolidation of employment services staff, some of whom are in posts specially created to help with youth employment problems. Sweden has likewise made efforts to ensure that at each employment service (AMS) office there is at least one member of the staff with a special responsibility for young people and there has been a conscious attempt to provide them with more intensive placement services, more contact and more follow-up action to test that placement has been successful. The United Kingdom has given priority to strengthening the careers service (which handles placements of school leavers and young people under the age of 18) so as to help the areas of the country where unemployment of young people is most severe. Outreach officers have been appointed to make contacts in cafés, sports clubs and other places where young people meet with young disadvantaged workers who would fight shy of going to a traditional administrative agency. The United States has continued its efforts to develop the quality of employment services to youth through experiments under the Youth Employment Demonstration Projects Act. The evaluation of these may lead to changes in operations.

France has reported two measures which can be considered under this heading. One of these is the maintenance of the structure introduced in 1977 with Enterprise Employment Delegates at the level of the "Département". Their main function which continues under the Third Employment Pact (dealt with in more detail later) is to inform enterprises of the employment-creating measures which could apply to them and to facilitate communications between enterprises and the administration. The other measure is the mobility grant for young persons under 26 who, within a year of completing their studies, cannot find a job less than 30 kilometers away from home and have to move and take a job in the private sector. They can receive a grant of Frs. 5,200 plus reimbursement of travel costs.

Before concluding this sub-category, some mention should be made of two types of measure which have not been so very frequently reported on and which fit in here more conveniently perhaps than they would do elsewhere. The first is involvement of local authorities and other interested bodies in drawing up plans to reduce local youth unemployment. Denmark, Norway, Sweden, the United Kingdom and the United States have followed this approach. In the case of Norway, municipalities and counties assist the employment service by making proposals for job creation, including special jobs tailored to the capacities of the local labour force, and for extra training measures. In Sweden, local planning councils are viewed as a bridge between education and employment.

Table

BREAKDOWN OF SPECIAL MEASURES TAKEN BY COUNTRIES TO GENERATE EMPLOYMENT FOR YOUNG PEOPLE BY SECTOR AND DURATION

(a) PUBLIC AND THIRD SECTORS

Temporary Duration Jobs

Australia (Community youth support and volunteer youth programme)

Belgium (Temporary jobs for stagiaires)

Canada (Fed. Youth Jobs Corps, Young Canada Works, Summer Youth Emp. Programme)

Denmark (Employment projects)

Finland (Employment subsidies to local authorities, extra office jobs for youth)

Ireland (Temp. grant scheme for youth unemployment, community youth training)

Netherlands (Additional job-creation prog. Temporary jobs scheme)

New Zealand (Temp. employment prog., student community service programme)

Norway (Individual work places, jobs for handicapped)

Sweden (Relief work)

United Kingdom (Special Temp. Emp. Prog., Community Industry, Youth Opportunities Programme, Community Service and Project-based Work Exp.)

United States (Public Service Emp., Youth Com. Conservation and Improvement Corps, Young Adult Conservation Corps, Youth Incentive Entitlement Pilot Projects).

Indefinite or Permanent Duration Jobs

Denmark (Extra apprentices in public sector jobs)

France (Experimental community works)

Ireland (Environmental improvements, extra jobs in public service, Development Officers Scheme)

Norway (Sheltered jobs)

(b) PRIVATE SECTOR

Temporary Duration Jobs

Australia (Special Youth Employment Training Programme)
Belgium (Compulsory "stages" in enterprises)
Canada (Job Exploration by Students, Job Experience Training)
Finland (Experimental Work Experience)
France ("Stages" in enterprises)
Ireland (Work Experience prog.,career training prog., training in enterprises for apprentices)
Netherlands (Training subsidies for unemployed apprentices)
Norway (Individual Work Places)
Sweden (Relief work, Labour Market Training, Course on Working Life and Education)
Switzerland (Subsidies for temp. work on environmental projects)
United Kingdom (Youth Opportunities Programme - assessment and employment induction courses, Work Experience on Employers' Premises)

Indefinite or Permanent Duration Jobs

Australia (National Emp. and Training and Commonwealth Rebate for App. Full-time Training)
Austria (Marginal job-creation subsidies)
Belgium (Exemption from Social Security contributions and marginal job-creation subsidies)
Canada (Canada Manpower Industrial Training Programme, Employment Tax Credit Scheme)
Denmark (Temp. Emp. Subsidy)
Finland (Youth employment subsidies to the private sector)
France (Exemptions from Social Security charges, Emp. and Training Contracts)
Ireland (Emp. Incentive Scheme)
Netherlands (Temporary junior workers wage subsidy, subsidy for apprentices, subsidy for training young persons in ready-made clothing industry, 30 per cent wage subsidy, subsidy for engagement of long-term unemployed, subsidy for training job-seekers)
New Zealand (Additional Jobs Prog.,Additional App. Incentive Scheme)
Norway (Revised support for Apprenticeships)
Spain (Youth employment promotion programme and training assistance)
United Kingdom (Counter-cyclical support for training, Small Firms Employment Subsidy, Job Introduction Scheme)
United States (Apprenticeship Service, Tax credits for WIN enrollees)

Note : The table has been drawn up on the assumptions that :

i) subsidies to create employment without necessarily providing work experience or training in the private sector and subsidies which can be paid for more than six months in respect of any particular engagement are intended to generate indefinite or permanent employment ;

ii) schemes to promote employment in community groups, local authorities and organisations and other non-profit-making associations constitute the third sector measures ;

iii) training and work experience measures are included in the table only where there is an incentive to employers to employ persons and provide such training and work experience. Other measures to provide training, work experience and vocational guidance are considered separately in Section 3 below.

When it comes to creating or helping directly to generate new jobs, two pairs of sub-divisions were suggested : temporary or permanent ; and public sector or private sector. Other sub-divisions are conceivable, of course. For example, a distinction could be made between short duration and indefinite or long duration programmes, but this might have two main drawbacks. It would be confusing with the distinction we have made based on duration of the job ; and it might not bring out clearly enough that short duration schemes and programmes can be (and often are) re-enacted or extended whilst longer-term ones may be modified or interrupted. Another distinction could perhaps be between measures primarily to create jobs but which provide some training or work experience, and those measures intended primarily to provide training or work experience and where the job-creation impact is less important. Given the limited data available especially as concerns the objectives of some measures, this annex has had to adopt more clumsy criteria and we have therefore grouped all measures to promote training and work experience through payments of costs or incentives to employers as job-creation programmes. These measures could with equal logic be included with other measures to provide training, guidance or work experience, directed purely at the supply side. Rather than list measures several times, this inventory groups all the measures which are intended to have a job-creation element under the heading of "employment" and examines them under the four sub-headings referred to above : temporary or permanent jobs ; public or private sector.

As the above table shows, only one country, Ireland, is implementing programmes in all four areas. At the other extreme two countries for which information has been provided, i.e. Germany and Japan, have not reported the adoption of any special measures to generate jobs for youth, and three countries (Austria, Spain and Switzerland) are operating in only one area. By number of programmes, measures in the private sector outweigh those in the public sector, but whereas numbers of measures to generate permanent or indefinite duration employment in the private sector are the most important single group, all countries which have reported action on the demand side for labour (except Austria and Spain) are doing something special to provide temporary employment for young people.

It will now be appropriate to give a very brief description of the contents of each measure by sub-category, with indications of scope wherever possible.

i) Temporary Job Creation in the Public Sector

Australia. The Community Youth Support Scheme (introduced in 1976) gives financial assistance to community groups to provide work-oriented and some recreational and hobby activities for unemployed young persons. It also provides reimbursement of participants' incidental costs (participants continue to be eligible for unemployment benefit where appropriate). The budget for 1979/80 is Aus. $ 11.6 million for an estimated 295 projects and 48,000 annual participants. The Volunteer Youth Scheme is being developed (1979/80 is a pilot phase) to help unemployed young persons become involved in voluntary community services. It provides grants to assist community organisations and staff and facilities to organise the volunteers.

Funds for the pilot phase in 1979/80 : Aus. $ 200,000. Participants in this programme also maintain their eligibility for unemployment benefit. During 1980, 1200 places have been made available in Commonwealth Departments under the Special Youth Employment Training Programme to enable the employment of some 3600 trainees for 17-week periods at a cost of Aus. $ 7.4 million. (These numbers are in addition to the 45,000 SYETP trainees in the private sector). The Group One-Year Scheme provides places in 1980 for 350 first-year apprentices to be trained for private employers in Commonwealth Government establishments. Expenditure on this scheme in 1979/80 is Aus. $ 1.5 million.

In Belgium the State administrations and services, public service agencies, provinces and local authorities employing at least 50 persons have to engage stagiaires in a proportion of 2 per cent of their total labour force. The stagiaires must be under 30 years old and unemployed for at least 6 months. The "stage" lasts 6 months which can be extended once and during it the stagiaire is paid a salary equal to 90 per cent of the appropriate starting salary. This measure is identical to the scheme applying in the private sector except that it does not provide subsidies (see below, page 111).

Canada. The Youth Job Corps provided employment opportunities for unemployed youth and students through projects developed by Federal departments and agencies which enhanced participants' employability. The programme started in 1976 and the 1979/80 budget was Can. $ 48 million with an estimated 13,000 participants (5,700 man/years of employment). Young Canada Works was designed to fund projects at the local community level which provided work experience and skill development for students during the summer. It has operated since 1977 and the budget for 1979 was Can. $ 62 million for an estimated 36,000 participants. Unemployed young persons (not students) could be hired either as participants or as project managers. It has been calculated that the programme reduced the student unemployment rate by 2.2 per cent in 1978. Students whose parents were factory workers or manual labourers have accounted for a sizeable proportion of take-up. The Summer Youth Employment Programme started in 1974 and had a budget in 1979/80 of Can. $ 113 million and an expected 64,000 participants in projects put forward by Federal departments in order to provide students (especially those in areas where unemployment is highest) with opportunities to gain valuable work experience.

Denmark. Employment projects are mainly initiated by local authorities, but central government agencies, non-profit organisations and private persons can also start them. Projects may either be financed by regions or municipalities from their share of the national allocation of funds to fight youth unemployment or they may be implemented with the help of direct state subsidies. In 1978 14,000 persons participated.

Finland has a flexible system of grants to local authorities and private firms for actions to improve balance on the labour market. In 1978 the emphasis was on employment subsidies to local authorities for the employment of young people. It is estimated that this resulted in the generation of jobs for 42,000 young persons. A further 1,000 were placed in State offices under a separate scheme to generate extra office employment for youth.

Ireland operates a Temporary Grant Scheme for Youth Unemployment. The grants are made available to youth, sport and community organisations who employ men and women under 23 on projects of a desirable community nature or of a productive nature with a potential to become self-supporting (although this latter condition is not the dominant feature of schemes). In 1979 £ 2 million were allocated to the scheme which gave employment to an estimated 2,000 young people (760 man/years). The scheme has been considered very successful by the Irish authorities in providing employment and work experience whilst decreasing vandalism and petty crime and adding to the community's stock of facilities. Another scheme is the Community Youth Training Programme operated by AnCO (the Irish Training Authority) in co-operation with the Congress of Trade Unions, local authorities, interested local and community groups and the National Manpower Service. The programme started in 1975 and is of a temporary nature. It finances work which would not otherwise be carried out by full-time employees, benefits the community, has a sufficient training content and can be undertaken by young unemployed persons. The 1979 budget was £ 2.8 million to pay the costs of an estimated 90 projects for over 2,600 trainees.

In the Netherlands the Temporary Jobs Scheme aims at improving the chances of finding new jobs for long-term unemployed by providing them with a working base. Public sector employers receive a 100 per cent wage subsidy (up to a maximum of Fl. 35,000 p.a.) for engaging such persons ; 22 per cent of those assisted in this way in 1978 were young persons under 25. The subsidy is payable for six months for persons under 45 and for one year for those over 45, and for university graduates and senior research staff regardless of age. The Additional Job-creation Programme is a measure which came into force at the beginning of 1979 for a duration of 2 1/2 years. It replaces a number of earlier measures directed towards specific groups such as unemployed youth and women and provides a wage subsidy of up to Fl. 35,000 for up to one year's employment in additional jobs in the public sector. After six months operation, 3,690 persons had been placed.

New Zealand runs a Temporary Employment Programme to provide public sector jobs for registered unemployed persons who cannot immediately be placed. The jobs must be short-term ones. As of 1st October 1979 the scheme was broadened to cover reimbursement of long-distance transport or accomodation costs of participants and a 100 per cent salary subsidy for supervisors. The cost in 1978/79 was N.Z. $ 98 million for 17,000 participants at the end of period. A stop-gap programme, the Student Community Service Programme, is operated to relieve pressure on the labour market and direct vacation workers into temporary jobs in the public sector or with community organisations. It was operating in the 1979/80 summer vacation. In 1978/79 the costs were $ 5.2 million and over 6,100 were placed.

Norway has a Scheme of Individual Work Places under which job creation for unemployed young persons under 20 provides training and work experience in the public sector. This scheme (in operation since 1975) was covered by the recent report Direct Job Creation in the Public Sector (published by OECD in 1980). A follow-up study on those employed in this way in the first half of 1978 showed that 15 per cent were in employment they had found for themselves, 28 per cent were in jobs found by the employment service, 6 per cent were in training or education and 51 per cent were idle. In 1978 1,700 young people participated in the scheme.

Sweden provides both work experience and employment through the Relief Work Scheme (started in 1972). Under this, projects designed specially for young people can be arranged under the auspices of the central government, local authorities or through private arrangements. The work for any one individual should not last more than six months and during this time participants are urged to continue efforts to find more permanent employment. When the work is arranged by agencies outside central government the Labour Market Board reimburses 75 per cent of total daily costs of relief works for young people. In January 1979 nearly 41,000 young people under 25 were employed in public relief works.

The United Kingdom provides temporary employment and work experience through a number of schemes. The Special Temporary Employment Programme (STEP) is intended for long-term unemployed over 19. For the 19-24 age group this is taken as meaning unemployed for 6 months or more (for the 25 and over age group, 12 months unemployment or more). The present government has decided that the scheme should be concentrated in the areas of highest unemployment. The scheme provides reimbursement of wages and approved costs for providing labour-intensive short-term projects of social value. The present budget allocation is £ 42 million to provide employment for an estimated 12-14,000 p.a. Community Industry is a scheme which has operated since 1972 for the personally and socially disadvantaged aged 16-18 by providing work experience on projects of social value. The programme has a capacity of 6,000 places and the budget allocation for 1979/80 is £ 16 million. The Community Service scheme (which forms part of the Youth Opportunities Programme) and Project-Based Work Experience are open to the age group 16-18 and apply to those unemployed for 6 weeks or more. In some areas where unemployment rates are high the 6-week rule may be waived. The Programme provides a tax-free allowance for participants as they undertake community work of different kinds sponsored by local authorities, voluntary organisations, community groups, etc. A person can stay in this type of work experience for 6-12 months.

The United States, as is apparent from the table, has put considerable emphasis on its public sector temporary job-creation measures. Public Service Employment has been provided under Title IID of CETA since 1974, and Title VI since Spring 1975. Title IID jobs are intended to be for disadvantaged unemployed with structural employment problems and the jobs are meant to provide them with work experience. Title VI jobs are earmarked for the cyclically unemployed, with extra jobs being created for persons with a low income background or long-term unemployed. The 1979 budget for youth employed in these programmes is $ 2.4 billion for 450,000 young people. Under the Summer Youth Programme economically disadvantaged youth can be given work experience and some training in schools, libraries, non-profit-making and community organisations. The 1979 allocation is $ 694 million for 901,000 young persons. The Youth Incentive Entitlement Pilot Projects (also under CETA Title II) enable large-scale demonstration projects to be carried out to test the feasibility of guaranteeing jobs to 16-19-year-old economically disadvantaged youth who are in school or willing to return there and whether such jobs will increase rates of retention and completion. Most of the jobs created under this programme are in the public sector (85 per cent) and most of the participants are young people still in

school (94 per cent). The 1979 budget was $ 148 million for an expected 37,000 participants in 17 demonstrations. The Youth Community Conservation and Improvement Corps functions under CETA Title IV and seeks to provide employment in repairing and restoring public buildings and rehabilitating and weather-proofing low-income housing, etc. It is often administered directly by neighbourhood and community organisations. Its 1979 budget was $ 138 million for 34,000 participants. The National Young Adult Conservation Corps (CETA Title VIII) and the Youth Conservation Corps both attempt to provide temporary employment and work experience through conservation work on public land and waterways. Together the 1979 budgets amount to $ 334 million for some 70,000 participants.

ii) Indefinite Duration or Permanent Job Creation in the Public Sector

Denmark provides funds for hiring extra trainees and apprentices by county and local authorities and by central government agencies. In 1978 costs amounted to D.Kr. 26 million and 1,600 young people were engaged.

France is implementing an experimental scheme of community works under which non-profit-making organisations who engage unemployed persons can receive a subsidy of Frs. 24,000 over a period of a year, after which they have to continue the employment. The scheme is not restricted to young persons but they are among the chief beneficiaries. The cost of the scheme in 1979/80 is estimated at Frs. 120 million for about 5,000 persons.

Ireland created extra jobs in the public sector in the 1979 budget, some of which were to support youth employment. The Development Officers Scheme provides State financial support for the engagement of young persons to help develop youth, sport and other voluntary organisations. The State support covers 90 per cent of total labour costs in the first year, decreasing to 25 per cent in the fourth year. There were 20 participants in 1979. The Environmental Improvement Schemes (started in 1978) are to provide employment for unemployed persons under 25 on works of environmental, recreational or amenity value to the community and are of a temporary nature. The 1979 budget was £ 4.28 million and provided over 900 man/years employment. Under the Construction Industry Apprentice Recruitment Scheme local authorities were reimbursed for expenditure directly incurred in employing first-year construction industry apprentices. The scheme operated in 1978 and 81 apprentices were engaged at a cost of £ 27,000.

Norway operates a scheme to provide sheltered jobs for the handicapped in the public sector and in 1978 348 young persons under 20 were engaged in this way.

iii) Temporary Job Creation in the Private Sector

Australia runs a Special Youth Employment Training Programme to provide unemployed young persons with a combination of work experience and training for up to 17 weeks. Employers (including, as a recent development, Federal public services) can be paid a subsidy of Aus. $ 50 per week for each young person engaged in this way. The budget for this programme in 1979/80 is Aus. $ 28 million for an expected 40,000 participants.

Belgium obliges firms with 50 or more employees to take on "stagiaires" in numbers equal to 2 per cent of the firm's labour force. The "stagiaires" should be under 30 and unemployed for more than six months. The "stage" lasts six months (which can be extended for another six months) and during it the stagiaire gets a wage equal to 90 per cent of the appropriate starting wage. The firm receives a subsidy of B. Frs. 30,000 per stagiaire over 1 per cent and up to 2 per cent of the labour force. Firms with less than 50 workers can also receive the subsidy for up to 2 stagiaires.

Canada provided the Job Experience Training Programme for recent school leavers aged 15-24 who had been unable to find employment due to lack of work experience and skills. Employers received a 50 per cent wage subsidy for young people engaged under the terms of an agreement between the Federal government and the firm to provide 26 weeks of actual work experience in a newly created position. The programme terminated on 31 May 1979 and during its last complete Programme year expenditure was Can. $ 49 million for 41,000 participants (over 15,000 man/years). Evaluations showed that whilst the programme achieved its objectives of helping hard-to-employ youth and of enhancing their employability and short-term prospects in the labour market, the amount of genuinely new employment appears to have been low. The Job Exploration by Students Programme was intended to provide intending school leavers with exposure to the labour market to help them make an informed decision whether to continue their formal education or to enter the labour market permanently. The target group included young persons who may not complete their secondary education and subsequently would be likely to have difficulties in obtaining and keeping employment. Employers received a subsidy of Can. $ 1.75 per hour per student employed for up to nine weeks. The students were paid the going rate for the work performed. In 1979/80 the budget allocation was Can. $ 3 million for an expected 5,000 participants (830 man/years).

In Finland an experimental work experience scheme is being tried out in 1980 in one labour district. Under it 500 young trainees will have opportunities to gain experience and develop their capabilities. Employers will be compensated for the costs of taking on inexperienced youth. The budget for this experiment is Fmk 3 million.

In France the practical work experience courses in enterprises (the "stages pratiques en entreprise") introduced with the first Employment Pact of 1977 attempt to facilitate the transition from school to working life. Young people 18-25 years old are recruited for 4 months by firms which give work experience plus 120 hours' theoretical training. The young people do not have the status of employees. The firm does not therefore have to pay social security contributions and receives a subsidy equal to 70 per cent of the minimum wage (participants receive an allowance from the firm equal to 90 per cent of the minimum wage). In 1978 20,000 participated at a cost of Frs. 150 million. In 1979 and later years it is expected that there will be 120,000 annual participants at a cost of Frs. 900 million.

Ireland has a Work Experience Programme since 1978 for young unemployed persons, mainly 18-20 year-olds. They can be placed with an employer (who can be in the public sector) for a six-month course covering four phases : induction,

planned work experience, training and further education and counselling. Participants receive a weekly allowance of £ 20 which the employer recoups from the National Manpower Service later. The 1979 budget for the programme was £ 0.5 million for almost 5,000 persons. The Irish authorities report that the programme has been such a success that there is a scarcity of young participants in some regions because the majority of participants who completed the programme were offered permanent employment. The scheme has been established on a permanent basis but will be reviewed from time to time. A Career Training Programme was first run in 1976 to provide vocational preparation and personal development for young people seeking stable employment. Courses of six weeks duration are offered comprising off-the-job training followed by in-company work experience. The allocation for this programme in 1979 was £ 0.6 million for an estimated 200 persons. A scheme for Training in Enterprises for Apprentices (introduced in 1975) enables firms which do not need as many apprentices as in earlier years to be subsidised for engaging extra apprentices for their first year's training. At the end of this time the apprentices are placed in other firms where they can continue their apprenticeship. The 1979 budget was £ 0.45 million for 332 apprentices.

For the Netherlands there is a scheme to generate temporary extra employment possibilities in the private sector. The Temporary Scheme to Provide Jobs for Unemployed Apprentices subsidises (at the rate of Fl. 100 per week) employers or organisations which engage an unemployed youngster (under 23) for a practical training course. The trainee remains available at all times to take up normal employment. This scheme was continued in 1979 pending the introduction of a new plan to share the costs of training within industry. The latest reported figures for the size of the scheme were 360 cases a year.

Norway has a temporary job creation scheme in the private sector. Under it, the employer gets a wage subsidy of N.Kr. 3,000 when he hires a young person for a period of 13 weeks. A survey showed that after the wage subsidy period three-quarters of the young people got ordinary work, either with the same employers or with a new one.

Sweden arranges Relief Work with both private and public sector employers. Participants remain available for ordinary full-time employment. Normally relief work lasts up to six months and local authority and private sector employers receive a 75 per cent wage subsidy. As noted above, the number of young persons on relief work projects was 41,000 in January 1979.

Switzerland provides subsidies for temporary employment of up to 50 per cent of the cost of employing young unemployed persons lacking work experience on temporary work for environmental protection or improvement, or in agriculture.

In the United Kingdom the Youth Opportunities Programme enables young people aged 16-18 who have difficulty in getting or retaining regular work (i.e. out of work at least six weeks) to undertake a mixture of training and work experience in a variety of forms. Part of this programme consists of Assessment and Employment-Induction courses given on employers' premises mainly and lasting two weeks. This can be followed by Work Experience on Employers' Premises mostly lasting six months. Apart from these possibilities under the Youth Opportunities Programme, there is

also a scheme of Unified Vocational Preparation under which the employer is paid a subsidy of £ 4 per day for each trainee on off-the-job training under this scheme. This scheme applies to about 2,000 young persons and the budget for this programme in 1979/80 is approximately £ 0.8 million.

iv) Indefinite Duration or Permanent Job Creation in the Private Sector

Australia gives tax-exempt rebates to employers who allow apprentices to attend training courses in normal working hours. This scheme (Commonwealth Rebate for Apprentice Full-time Training, CRAFT, introduced in 1977) also provides a premium of 40 per cent of the annual rebate for apprentices who have completed appropriate pre-employment courses so that the duration of apprenticeship is reduced by at least six months. An additional rebate of Aus. $ 1,000 is paid for extra apprentices engaged between 1 December 1979 and 30 June 1980 over recruitment in the corresponding period of 1978-79. CRAFT also provides living away from home allowances for apprentices so as to promote their mobility. The 1979/80 budget is Aus. $ 56 million for 35,000 estimated new engagements and a total of 85,000 persons obtaining benefits under the scheme in this period. Another training programme, the National Employment and Training (NEAT) system introduced in 1974 provides a range of measures to assist in the training of unemployed persons, through both on-the-job and formal training. For example, the employer who provides on-the-job training for unemployed persons for skills in demand, receives a subsidy of Aus. $ 45.65 per week for juniors and $ 62.25 for adults. The programme also provides the same amounts as special assistance to maintain apprentices in employment. This applies when financial or shortage of work problems threaten the continuity of their employment. Firms which engage apprentices who have lost jobs because of the previous employer's problems and who are in excess of the firm's normal requirements also qualify for the same subsidy. Whilst it is difficult to segregate expenditure under NEAT according to different schemes and target groups, it can be noted that special assistance to maintain apprentices in employment has a 1979/80 budget of Aus. $ 2 million for an estimated 900 persons at any one time.

Since 1976 there has been a programme in Austria under which enterprises can get financial support for the creation of extra apprenticeship training places for which they have no immediate need. The reason for this programme is that in recent years the numbers coming on to the labour market have been high for demographic reasons and more training places have been needed. In all in the year 1978/79 some 2,300 training places were developed at a cost of Austr.Sch. 39.7 million and in 1979/80 over 2,000 training places cost Austr.Sch. 30.3. As the numbers of school leavers started to fall in 1979/80, this programme will lose importance.

In addition to this special programme, there are as part of the Labour Market Law, provisions for promoting apprenticeship training in training workshops within or outside enterprises.

Another form of assistance to apprenticeships is provided to the apprentices who would otherwise have financial difficulties in attending for apprenticeship training (especially when this involves costly travel). This should be seen as a form of aid to those from poorer families. Assistance was provided to over 23,300

apprentices in 1978 and over 26,900 in 1979 at costs of Austr.Sch. 68.5 million and 77.9 million respectively.

Belgium uses a mixture of exemptions from employers' social security contributions and employment premiums to encourage job creation. The exemptions from employers' social security contributions at first applied only to newly engaged youth (later extended to older persons) and only for those with indefinite-term contracts. The exemption extends for two quarters' payments provided that there is a net increase in employment and can (as from 1st August 1978) be raised to four quarters' for new firms and those with less than 50 employees but with a maximum of two newly created jobs being subsidised. Enterprises have a choice of two forms of employment premium. Under the first formula (the premium for the middle classes) a subsidy of FB 15,000 per year per worker is granted to enterprises which, prior to this engagement, employed not more than 14 employees. It is given only for extra employment bringing numbers employed up to 15 workers (net additions). So long as the extra employment is sustained the subsidy can be claimed for five successive years. According to the second formula (which is under the competence of the Ministry of Employment and Labour) employers who had been subject to pay social security contributions for at least a year on 30 June 1979 and who, before 31 December 1980, engage on indefinite-term contracts employees with the necessary characteristics, can be eligible for an adaptation or readaptation grant of FB 250,000 per year per worker, which can be extended once. The new engagement must lead to an increase in average numbers employed and the enterprise must institute before 31 December 1980 a 38-hour working week. The number of grants payable varies with the numbers employed. Enterprises with between 1 and 5 workers can be eligible for one grant, whereas enterprises with 40 workers or more can be eligible for grants corresponding to 10 per cent of their labour force. It will be noted that neither of these schemes is specifically directed towards young people but they are expected to benefit from the schemes.

Canada under the Canada Manpower Industrial Training Programme provides financial incentives for training in industry, including reimbursement of costs incurred by the employer in providing classroom tuition. The programme is aimed at providing both employers with the skills needed in the enteprises and workers (of whom 50 per cent are youth) with better job opportunities. The 1978/79 budget was Can. $ 83 million for 74,000 trainees. Under the Employment Tax Credit Programme employers can obtain a tax rebate for creating and filling extra jobs which would otherwise not exist. The jobs must be expected to last a minimum of 3 months, be full-time and pay at least the minimum provincial wage rate. Workers engaged in this way must be unemployed and registered for employment. Over half those engaged under this programme (56 per cent in fact) are young persons. The 1979/80 budget was Can.$ 100 million for an estimated 50,000 new hires.

Denmark provides what are known as "temporary" employment subsidies but which are designed to result in the creation of permanent jobs. They can be given when firms increase total employment by taking on young people who have been unemployed for three months or more. The amount of subsidy is set at D.Kr. 16 per hour for 13 weeks followed by D.Kr. 11 per hour for 13 weeks (under-18s qualify for 26 weeks at D.Kr. 11 per hour). If the new recruit has been unemployed for a long time, the

subsidy can be extended for a further 26 weeks. The 1978 budget, D.Kr. 13 million, was used to support the engagement of 2,500 young workers. This was less than the original target. Problems arose in securing agreement on implementation from the social partners. Another scheme subsidises employers in the private sector who engage extra apprentices and trainees in occupations recommended by a central contract committee. The subsidy is paid at a rate of D.Kr. 16 per hour up to a total of D.Kr. 16,000 within the total duration of the traineeship/apprenticeship. In 1979 7,200 were employed in this way at a cost of D.Kr. 105 million. Trainees receiving basic occupational training make up a quarter of those engaged under this scheme and three quarters were apprentices. Men outnumbered women by 6:4 and most of the positions (53 per cent) were in the tertiary sector with 45 per cent in manufacturing and 2 per cent only in the primary sector.

Finland likewise has had a scheme on youth employment subsidies in the private sector since 1977. It is intended for young persons under 20 who are registered as unemployed and sign an apprenticeship agreement. It also applies to young persons under 20 engaged for in-plant training and for persons completing military service within the preceding 12 months. Subsidies amount to Fmk. 750 a month in respect of apprenticeship agreements and Fmk. 420 for in-plant training. Subsidies are payable for up to 12 months. The 1978 budget was Fmk. 47 million for 6,000 persons.

In France the system of exempting employers from paying social security contributions for one year for net increases of employment involving young persons under 26 has figured in all three successive Employment Pacts. In the Second Pact (1 July 1978-31 March 1979) 95,000 young persons were engaged at a cost of Frs. 475 million. In the Third Pact (covering 2 1/2 years up to end 1981) it is estimated that the measure will affect 135,000 young persons a year at an annual cost of Frs. 675 million. The exemption has been reduced to half the employers' normal contribution. Under the Second Pact there was an additional measure under which employers engaging new apprentices were completely exempted from social security contributions. It affected 104,000 young persons at a cost of Frs. 440 million. Under the Third Pact there is instead a similar exemption from employers' contributions to encourage the development of apprenticeship contracts. This applies to artisans and small firms (fewer than 10 employees) for the whole duration of the apprenticeship contract and to the first year of contracts in larger industrial firms. The target here is 230,000 young persons at a cost of Frs. 920 million annually. The system of Employment/Training contracts has also appeared in successive pacts, albeit with some changes. Under the Third Pact there can be two different types of contract for young people aged 17-26. The first is for an "insertion contract" for a job guaranteed to last at least six months and for which 120-500 hours of training are provided. For the "qualification contract" the job is guaranteed to last at least one year and training can be in the range 500-1,200 hours. Firms receive a subsidy for training at a rate of Frs. 26 per hour. The course of training must first be approved by the appropriate service of the Ministry of Labour. The target here is 50,000 contracts a year at a cost of Frs. 525 million. When an artisan takes on his first full-time employee for a job lasting at least a year he can obtain a premium of Frs. 5,000 under an extension of this scheme (scope 12,000 young persons, cost Frs. 60 million).

Ireland has the Employment Incentive Scheme under which employers who increase their labour force by recruiting unemployed adults or school leavers receive a premium for each month that the new recruit remains in employment and the labour force remains above the base figure for employment. Different rates of premium are offered according to whether the person recruited is over 20, registered as unemployed for at least 4 weeks and having received unemployment benefit or assistance in the last two years, or under 20, registered as unemployed and having received benefit in the last two years ; for both of these groups the premium is £ 20 per week ; and for persons under 25 taking their first permanent job after leaving full-time education the premium is £ 14 per week. In 1978 it is estimated that 7,100 young persons were engaged for an expenditure of £ 2.8 million.

The Netherlands operates a number of employment subsidy schemes. The Temporary Junior Workers' Wage Subsidy applies to young people aged 17-23 registered as unemployed for 6 months or more who are engaged on full-time indefinite-term contracts. Employers receive a subsidy of Fl. 650 per month for up to one year. Expenditure on this scheme in 1978 amounted to Fl. 10.1 million for 2,100 new engagements. The Subsidy for Apprentices is a measure to encourage employers to offer school leavers an apprenticeship contract. A weekly subsidy of Fl. 100 is paid out of a 1978/79 budget allocation of Fl. 70 million, enough for an estimated 1,400 new apprentice contacts. The scheme of temporary subsidies for training young workers in the clothing industry is intended for unemployed or employed production workers under 23 for whom no suitable stable employment is available without further training. The subsidy is based on minimum wages for junior workers and was paid for almost 1,000 persons at a cost of Fl. 3.6 million in 1978 (6,000 at a cost of Fl. 10 million in 1977 when the programme operated over a long period). In February 1979 a new subsidy scheme started for employers engaging long-term (i.e. more than one year) unemployed on contracts of indefinite duration or for fixed terms of at least one year. The subsidy amounts to 75 per cent of labour costs up to a maximum of Fl. 26,250 p.a. (the ceiling is lower for younger workers under 23). By July 1979 some 520 persons were benefiting from this measure. Another subsidy, the 30 per cent wage subsidy, is paid to employers who engage hard-to-place unemployed, defined as those out of work for more than six months and under 45, or those over 45 immediately on becoming unemployed. The subsidy lasts six months for the younger group and a year for the older group and cannot exceed amounts of Fl. 5,000 or Fl. 10,000 respectively. In 1978 about 400 young people were engaged through this measure. There is also a subsidy scheme for employers training job-seekers or those threatened with redundancy under which Fl. 160 is paid for each trainee and effective days training. About one-third of those assisted are under 23 and total applications in 1978 came to just under 2,000 at a cost of Fl. 34 million.

In New Zealand the Additional Jobs Programme provides a subsidy of N.Z. $ 40 a week for the first six months employment by young persons in a non-farm job additional to numbers previously employed or the average employment over the previous 12 months, whichever is the higher. In order to provide more job openings, this scheme was extended from manufacturing on 1st October 1979 to include wholesale and retail trades and financial services. In the year ending 31 March 1979, 6,737

persons were placed through the programme at a cost of N.Z. $ 2.6 million. A First Job Programme was in operation for six months in 1978. Under it, employers engaging young unemployed persons who had not held a job for more than six months in the previous 12 received a weekly subsidy of N.Z. $ 20 for the first six months employment. If the worker was still employed after a year the employer could receive a further payment of N.Z. $ 520. The cost over 15 months to July 1979 was N.Z. $ 0.7 million for 1,656 total placements.

In Norway the conditions for the engagement and employment of apprentices were being reviewed and consideration was being given to increasing the rates of financial support for them.

Spain has a Youth Employment Promotion Programme for 16-26-year-olds. Employers are given an incentive to recruit from this group by partial remissions of their social security contributions : 75 per cent for a young person's first engagement, 50 per cent for subsequent ones. Employment promotion contracts between the State and firms and employers' associations seek to promote youth employment with contracts lasting between six months and two years. These measures are reckoned to have resulted in 101,000 engagements between May 1978 and July 1979.

In the United Kingdom the Small Firms Employment Subsidy (introduced in 1977) provides manufacturing firms with less than 200 employees in the Special Development Areas of the country with a weekly subsidy of £ 20 for each newly-created job. The subsidy lasts a maximum of 26 weeks. Over a two-year period ending 30 June 1979 22,000 firms had joined the scheme and subsidies totalling £ 22 million had been paid out. It should be noted that during this period the coverage of the scheme had been greater than is indicated here. Prior to fiscal year 1979/80 there had been a series of annual programmes to provide special counter-cyclical support for training within industry. Four main forms of assistance were provided : (i) premium grants of up to £ 2,250 to encourage employers to recruit young people for apprenticeships and other long-term training in excess of normal requirements ; (ii) training awards covering the full cost of initial apprentice training plus a weekly allowance to the trainee where it was anticipated that even the grant-induced training would be insufficient for an industry's needs ; (iii) sandwich course grants to encourage employers to make good a shortfall in opportunities for industrial experience ; (iv) special support for the construction industry. In 1977/78 actual expenditure on these different schemes amounted to £ 38.5 million for 36,000 trainees. As from 1979/80 these schemes are replaced by the Training for Skills Programme under which industry and commerce should draw up realistic plans to assess and meet their manpower needs, and Industrial Training Boards and the Manpower Services Commission should identify where funds are needed to achieve key objectives and provide the necessary funds. It is expected that the cost of this new programme will be about £ 50 million in 1979/80 and that it will affect about 40,000 persons (not exclusively young people). The Job Introduction Scheme applies where an unemployed disabled person seems to be suitable for a job but the employer has reasonable doubts about his or her ability to do the work. It provides £ 30 a week for a trial period of 6-13 weeks and between July 1977 and end May 1979 a total of 2,000 disabled persons (including young persons) had been placed through it at a cost of about £ 0.3 million.

The Youth Employment Subsidy was in force between October 1976 and March 1978. It provided a subsidy of £ 10 per week for up to 26 weeks to an employer engaging a young person under 20 who had been registered as unemployed for six months or more. Experience of the scheme and a survey of employers indicated that about three-quarters of the engagements would have taken place even without the subsidy and, accordingly, it was discontinued.

In the United States the Apprenticeship Service provides advice and standard setting services. It also seeks to extend the number of occupations in which apprenticeships can be served, including some in the armed forces, as a means of increasing stable employment opportunities for young people. An element of the Work Incentive Programme (WIN) also has job creation possibilities. This is the tax credits which employers can qualify for when they hire a WIN registrant. Until 1978 this had been very little used. Subsequently the credit was liberalised and may be more widely used as a result.

2. Education

This is an area where fewer countries have reported specific measures with the objective of alleviating youth unemployment and employment problems. Several factors may explain this. First, there is a definitional problem of where to draw the boundary between general education and vocational education, work experience and training which are dealt with in the next section. Second, there is the problem of distinguishing between normal developments and improvements in education basically and an acceleration, re-orientation or extension of these trends for employment objectives. Nevertheless, 11 countries have measures which can be reported under this heading.

In Australia the National Employment and Training system (NEAT) includes an education programme for unemployed youth. This provides short full-time courses of instruction in basic literacy and numeracy and vocational skills and counselling for unemployed young people 15-24 who need improved basic skills in order to obtain stable employment. Whilst following these courses, participants receive an allowance equal to the rate of unemployment benefit plus Aus. $ 6 per week. In 1979 the programme, jointly financed by the Departments of Education and Employment, had a budget of Aus. $ 7.1 million for 6,200 participants. Under the Comprehensive School to Work Transition Policy, which aims ultimately at providing all young people 15-19 with options in education, training or employment, or combinations thereof, the capacity of this programme is being increased in 1980.

Denmark, with its decentralised approach to youth employment problems, has authorised local authorities to undertake (with reimbursement from State funds) courses of general education for the benefit of unemployed young people. The courses can be arranged under the Act on leisure-time education in a variety of settings : folk high schools, home economics schools, agricultural colleges, continuation schools or youth schools. Expenditure in 1978 amounted to D.Kr. 9 million for 460 persons. Experiments are also being carried out in which unemployed young persons combine productive work and education. The work can be undertaken by local or county authorities or by independent institutions or co-operative organisations, but must

be aporoved by the local labour market board. Individual projects, including the education element, are finally authorised by the Ministry of Education.

For Finland there has been a direct connection between local youth unemployment rates and educational developments in that, in six provinces with high youth unemployment, the capacity of the comprehensive schools has been increased by a tenth class. This class is meant for students who have not been admitted to vocational education or secondary school on completion of the normal comprehensive school curriculum and who would otherwise probably have been unemployed. The total cost of this extension in 1978/79 was Fmk. 4.5 million and it concerned 1,100 young people.

The situation in Germany differs from that in most of the other OECD countries because of the intermeshing of normal education, vocational training and employment. It is therefore pertinent to describe it briefly (a fuller discussion of the issues which arise in the present situation of youth unemployment will be taken up in the forthcoming review being conducted by OECD, to be published). The normal educational requirement is for children to complete 12 years' education, of which the last three may be part-time vocational education. Already during the period of full-time compulsory schooling, pupils receive some basic vocational orientation and instruction. In the basic secondary and comprehensive schools this takes the form of a study of the world of work and a general introduction to the world of industry and labour. It should involve visits to workplaces and local enterprises. In the general secondary schools and gymnasia there are introductory courses on the functioning of economic and social systems.

After completing compulsory full-time education, about 90 per cent of young people acquire a further general or vocational qualification. The latter can be obtained in three different ways (in addition to courses at universities and technical colleges) : through the dual system of employment and training, through full-time vocational schools and through other arrangements outside the schools and at the place of work.

The dual system is the most important of these and has a capacity of 1.5 million persons, roughly 60 per cent of the 15-18 year age group (as against 370,000 in full-time vocational schools). The dual system provides practical training at the worplace and theory at part-time vocational schools. The training can be given in 452 trades but, in fact, 70 per cent of trainees are following the 20 most popular trades. Training lasts 2-3 years or even longer and during this period the trainees have the legal status of employees under the Vocational Training Act which provides comprehensive and uniform guidelines for training programmes. The delivery of the training and examinations and accreditation are in the hands of local Chambers of Arts and Crafts, Commerce or Agriculture. Interfirm training centres, owned by non-profit organisations and local authorities, have been established to provide possibilities of on-the-job training for trainees in small firms.

The main changes which have taken place in this system since 1974-75 have been :

- the development of the basic vocational education year ;
- the growth in special measures to assist unemployed youth and school leavers unable to find/obtain a training position.

The basic vocational education year and the general extension of a 10th compulsory full-time school year are gaining ground not least because of the labour market situation.

The special measures (which were mostly introduced about 10-12 years ago) consist of courses mostly lasting a year in :

Compensatory pre-vocational training (F Lehrgänge) under which suitable candidates are prepared so that they can later fit into a normal vocational education programme (14,800 participants in 1977/78)

Basic vocational training (G Lehrgänge) for those failing to be accepted for normal vocational education or who have failed to get employment after training (10,300 participants in 1977/78).

Adaptation programmes for the handicapped (V & T Lehrgänge) for those less likely to benefit from vocational education. The V Lehrgänge courses prepare young people for employment in the open labour market ; the T courses for special workshops for the handicapped. (Altogether 7,900 participants in 1977/78). Some of those attending these courses (about 30 per cent of F Lehrgänge and V and T Lehrgänge trainees) go to residential centres set up for this purpose.

Ireland has instituted pre-employment courses for those who leave school to seek employment on reaching school-leaving age but who, on failing to find employment, return to school to attend a course to assist them secure a job. These courses are full-time, last a year and have three main components : personal development (including general studies), technical studies and work experience. In 1977/78 the courses were followed by 1,600 students.

New Zealand has noted a recent development of pre-employment courses within secondary schools with the growth of youth unemployment. These courses are aimed at those who would want to leave school as soon as they are entitled to do so (i.e. at 15) but would be unable either to obtain jobs or qualify for unemployment benefit until they are 16. Courses are generally 5-8 weeks long and are intended to increase participants' employability and give them some experience of work. The specific aims of these courses are to help students clarify their own values and expectations and to acquire appropriate pre-vocational skills.

In Norway a recent report to the Storting (Parliament) on Employment Policy explained that an expansion of the capacity of the education system would enable better education and training to be given in the upper secondary schools. The expansion which has been planned is for 5,000 places yearly in 1980 and 1981 and then 4,000 places in successive years up to 1985. Already in 1979 a sum of N.Kr. 5 million had been voted to provide extra places in upper secondary schools. 1979 also saw the general introduction of an integrated vocational guidance programme for all tenth-year students in comprehensive schools.

Sweden's local offices of the AMS notify vacancies in educational courses in the same way as they list job vacancies. They also initiate courses at upper secondary and folk high schools to meet the needs of the local unemployed. Those taking such courses qualify for the government study grant. Early in 1977 the government decided that the total number of places in upper secondary schools could be exceeded in order to ease the prevailing labour market situation. This provision

is mainly used to provide short (10-week) vocational courses and introductory and summer courses for young immigrants ; their combined capacity is about 10,000 young persons.

Some cantons in Switzerland have increased the length of schooling so as to provide a tenth year of normal schooling and a pre-work course.

In the United Kingdom the government is reviewing education, further education and training provision for the 16-19 age group in order to allow local education authorities, which have the major responsibility for providing the system, to make the best use of their resources to ensure that young people have the widest possible education and training opportunities and guidance on how best to choose among them. Some elements of the Youth Opportunities Programme have an educational content, such as remedial courses in Colleges of Further Education. These are intended to put right basic deficiencies ; length varies according to individual needs. Certain special programmes in Northern Ireland, such as Youthways, are more general than vocational and work experience courses and aim to improve the attitudes and employability of the unmotivated and unqualified.

Some Youth Incentive Entitlement Pilot Projects are implemented in the United States. These projects are intended to test whether the provision of work and income in suitable cases will lead to an improvement in school retention and completion rates. Jobs are provided on the understanding that the young people who take them remain in school. The 1979 budget for these projects was US $ 148 million for an estimated 37.000 participants. Career education as distinct from vocational education is woven into all strands of the national education process. The state agencies charged with implementing career education in United States schools can get Federal grants for this purpose.

3. Vocational Education, Training and Work Experience

This section is concerned with a wide variety of measures to ease the transition from school to work, some of which have already been discussed in recent meetings of national experts within the programme of work on youth unemployment. One of these meetings was on the assessment of vocational education in secondary schools, another was on assessment of preparation in school for working life, and a third was on assessment of work experience programmes. This section is more in the nature of exemplifying the wide range of measures taken rather than providing a comprehensive survey of them.

Belgium has put special emphasis on observation and orientation centres as a means of providing better vocational guidance. Unemployed young people attend the centres for two or three days in order to be informed about the employment and training possibilities in their region. Then for 4-6 weeks they are followed by teams of instructors and psychologists who study their aptitudes, motivations and mental capacities and give them work experience in an environment as close as possible to that of a normal workshop or office. At the end of this period recommendations can be made concerning future orientation. In 1978, of almost 26,000 young people invited to attend the centres 16,000 attended for the full observation period, 8,700 were directed towards training centres and 6,800 completed

their training course and approximately a further 1,500 were recommended to the teaching centres which specialise in correcting defects in basic education.

In addition to the work experience programmes run in Canada, to which some references have already been made in Section 1 above, vocational guidance assistance is given through the employment counselling service of the Canada Employment Centres. The objective of this service is to help the client become effective in his or her efforts to integrate into and adjust to the labour market. This involves joint efforts to :

a) determine what his or her occupational goals are and to assist in a realistic and satisfying integration into the labour market ;
b) find and implement the solutions and corrective action needed to overcome the obstacles to this integration ;
c) teach the client to become independent in his or her efforts to find work in the face of future realities and changing labour market conditions.

The material used by the service in these efforts includes aptitude and interest tests, extensive documentation on occupations and educational possibilities, occupational exploration and choice tools, and a guide to a creative job-search technique. In 49 Canada Employment Centres, a cost-effectiveness study is being conducted in a pilot project involving the use of "CHOICES", a computerised occupational information system designed to enable people explore their career options and make occupational decisions through direct conversation with a computer. This system will be made available to provincial governments and other users through two Canadian companies licensed to market CHOICES. The budget for developing methods and materials for employment counselling is about Can. $ 3 million annually.

In Denmark courses of vocational preparation, the EIFU courses, provide for basic and induction training. The courses last 10-12 weeks and include a 4-week period of work experience in firms. The courses can lead on to more formal training where desirable. The 1980 budget for these courses is D.Kr. 53 million for an expected 6,700 participants. Special efforts are also made to help re-orient the long-term unemployed and to improve their basic education and occupational skills. The courses are for those with more than 200 days unemployment in the past year and half the participants are under 30. The budget for these courses is about D.Kr. 4 million a year for roughly 1,000 participants.

Finland has temporarily increased the capacity of its vocational education system by 10,000 places in 1979 in an effort to alleviate unemployment among young people. Temporary courses give a 1-2 year course of basic vocational education mainly for 16-17-year-olds who have not been able to attend the normal vocational schools and who would be vulnerable to unemployment. The rapid expansion in these temporary courses which has taken place since they were first authorised in 1976 led to problems of excess capacity and cancellation or postponement of courses. Attention has therefore been given to improve recruiting. The expectation was that in 1979 there would be an average of 12,350 students on these courses (compared to 11,500 in 1978 when expenditure came to Fmk. 155 million).

Ireland is developing its occupational guidance service which operates through the regional offices of the National Manpower Service. In 1978, of a total of 1,205 clients using this service, some 70 per cent were young persons under 25. Vocational training by AnCO training centres also continues to expand. Here, too, clients are not exclusively young persons but they are a majority of the trainees. The 1978 budget for AnCO was £ 6.7 million for 7,600 trainees in the training centre programmes. In early 1979 a "crash programme" was put in hand by CERT, the organisation which specialises in training for the catering and hotel trades and, as a result, an additional 380 unemployed persons were given training in an area where employment prospects were good.

The Netherlands implements retraining courses for unemployed young persons, primarily those with no or limited educational qualifications registered as unemployed. Courses are organised by the regional centres for occupational guidance in conjunction with the employment service offices. The courses can lead either directly to employment or to more training, as appropriate. Whilst on the course, participants remain registered as unemployed and available for suitable employment The 1979/80 budget is Fl. 8.2 million and the 1977/78 attendance figures were about 1,000 participants a year. This measure is likely to be altered in the near future so as to improve its structural impact. The Netherlands provides special occupational guidance centres for young immigrants, mainly those from Surinam. The centres also provide training to help them to integrate in their labour force. People without skills or with difficulties in finding a job can have the costs of private study reimbursed. This covers tuition, materials and travelling costs, but the training must be given by a recognised and approved institution. In 1978 applications for reimbursement came from nearly 11,700 persons (cost Fl. 4.9 million) and it is estimated that rather under 30 per cent of them were 23 or younger.

In Norway the age limit for acceptance on courses of labour market training has been reduced from 20 to 19. In exceptional cases young people under 19 can be offered a place. Special courses have been organised for young persons under 20. It had been intended that these courses would be on-the-job as well as off-the-job. In fact, because of practical difficulties, only off-the-job courses have been organised. They have lasted 13 weeks, extended to 18 weeks for migrants with language problems, and have been attended by almost 400 participants in 1979.

Spain has set up a vocational guidance system for young persons. It consists of 28 guidance centres and 56 guidance teams and includes the provision of information in schools.

Sweden has traditionally laid stress on introducing labour market information and vocational guidance gradually from an early stage of education and helping pupils make their own decisions about the transition from school to work. There has been an increase, beginning in 1977/78, in the practical guidance about working life given in compulsory schools from two weeks to a minimum of six weeks. In the upper secondary schools the theoretical streams have also been given practical working life instruction for 1-3 weeks a year. For those pupils not applying for further education beyond the compulsory system or dropping out of compulsory or upper secondary education, there has been an extension of study and vocational

guidance visits. These are intended to forestall problems arising after leaving school and were first implemented as a pilot scheme in 1974/75. Local planning councils have been set up to promote collaboration between school and working life. The school, the employment service, employers and trade unions are represented on these councils which were established (in 1977) in each local authority area. The councils advise the local education authority and plan the schools' contacts with working life as regards education and training as well as practical guidance about working life. They are expected to follow the employment situation for young people in their area and to initiate relief works and courses for unemployed young people. Schools collaborate with the employment service through the regular arrangement of labour market days - instructional activity for young people who will shortly be leaving school. This is a regular feature of the schools' guidance programme on working life from 1977-78.

A final aspect of guidance which merits attention in Sweden is the guidance groups to provide a new method of combining labour market information and guidance in direct association with placement work. Up to eight participants meet for two days with psychologists and careers officers or other officials from the employment service. Follow-up discussions with participants are planned at the outset when a person joins the group. As regards training, a particularly useful course for those uncertain whether to go into employment or into education has been the course on working life and education (ALU). When young people have socio-psychological problems which hamper their integration into the labour force, a special version of this ALU course can be given which lasts 20 weeks instead of the usual 6 weeks. The course is given in two parts, a theoretical part with general labour market information, personal and practical vocational guidance, hygiene, ergonomics, social subjects and working life orientation, Swedish and mathematics. The practical part covers work experience in the open labour market or in a training centre. Participants are followed by a team of specialists in employment, social and medical fields who assess the qualifications and suitability of participants for later employment.

Switzerland has recorded increased recourse to its vocational guidance system - 101,000 visits in 1978, increased possibilities of apprenticeships due to an appeal to cantons and leading associations (over 3,500 places more in 1978 than in the preceding year), and better information about employment possibilities with training. It is envisaged to provide more training up to semi-skilled level to fill gaps in the training system.

In the United Kingdom Unified Vocational Preparation has the broad aim of helping young people make a better start in working life by enabling them to : assess their potential and think realistically about their future ; develop the basic skills needed in adult life and at work ; get a better understanding of the way society works and their place in it ; equip themselves to benefit from further training and education. UVP courses are taken by young people on entry to employment. They consist of integrated programmes of education and training off-the-job together with on-the-job training and job rotation. The courses are varied, being tailored to suit the needs of particular industries, but a typical one might consist of a short period (2 days a week) of release from work to a college of further education,

followed by one or two days release a week for a period of up to one year. This would often be coupled with the planned programme of experience and on-the-job training at work. Many schemes include a residential element of up to one week. The Youth Opportunities Programme (to which reference has already been made in Section 1 of this annex) also helps facilitate the transition from school to work. This programme includes a number of schemes to provide work experience and training ranging from two-week-long assessment and employment induction courses to project-based work experience (doing useful community work of practical value) lasting 6-12 months or training workshops also lasting up to about a year for each individual participant. The Training for Skills programme (also referred to earlier in the annex) is another main tool for helping young people and others acquire the sorts of skills which will help them obtain regular employment.

As regards the United States, Title IIB and C of CETA provides employability development services for the economically disadvantaged unemployed or under-employed. The services in question take the form of either classroom or on-the-job training for adults and of subsidised work experience for youth ; 55 per cent of all participants are young persons. Participants are paid wages at the minimum Federal level (US $ 2.90 an hour) on the work experience elements of the programme and allowances on the training element ; and businesses are reimbursed their on-the-job training costs. The 1979 budget provided US $ 1.1 billion for this programme and catered for 660,000 young persons. Under Title IV of CETA the Jobs Corps Programme trains severely disadvantaged and unemployed youth and places them in employment. This is a high cost programme in which remedial education, social rehabilitation and vocational training are provided in 85 residential centres. States, non-profit organisations, community-based organisations, firms and trade unions operate the centres on behalf of the Federal government. The 1979 budget for this programme, catering for 33,000 participants was US $ 0.4 billion and in 1980 participants are expected to be 44,000 strong. The National Pre-Apprenticeship Training Program provides three different approaches mainly concerned with remedial education for young people in racial minorities so that they can qualify for admission to apprenticeship. The 1979 budget for 30,000 participants was US $ 38 million.

4. Unemployment Compensation and Welfare Assistance

There is relatively little to report under this heading and only six countries need to be mentioned.

Australia provides income-tested benefit financed out of consolidated revenue for registered unemployed persons aged 16 or more who are able, willing and making efforts to work. There is also a special benefit available for persons under 16. Over 56 per cent of those in receipt of benefit at 1 June 1979 were aged 24 or under. There is a one-week waiting period (six weeks in the case of school leavers) before applicants for benefit are entitled to begin receiving such payments. Provided unemployed persons continue to satisfy the requirements, they can continue to receive benefits indefinitely.

As regards Belgium, it should be noted that young people completing certain types of full-time study or apprenticeship can qualify for unemployment benefit provided that they are under 25 at the time of claiming and have completed their studies/apprenticeship less than one year ago. In addition, claimants must have been registered as job seekers for 75 days (3 months) or been employed for this period. They must be ready to accept any training, suitable employment or "stage" which is offered and they must apply for a "stage".

In Denmark a number of modifications have been made which widen access to benefit :

- the minimum age for admission to the insurance funds has been lowered from 18 to 16 ;
- the minimum qualifying period of employment before benefit can be claimed has been reduced from 12 to 6 months ;
- the rule of at least 26 weeks of employment in the preceding 4 years has been abolished for those under 22 ;
- conscripts for national service can be admitted to the insurance funds and can therefore qualify for benefit if they are unemployed on leaving the armed forces ;
- benefit can be paid to those attending courses at folk high schools.

In addition to these changes, a scheme has been introduced for long-term unemployed (under 60) on the verge of losing entitlement to benefit because of the 26-week rule mentioned above. This entails a guaranteed offer of work of at least 9 months' duration. Employers in the private sector can obtain a subsidy of D.Kr. 25,000 if they employ persons in this group as an addition to their normal work force. If jobs cannot be found in the private sector, then the municipalities must find jobs for these people and this is where 80 per cent in fact go.

In the Netherlands there has been a relaxation of the rules preventing those in receipt of benefit from doing unpaid work. The rationale for this is the desire to maintain levels of skill and a positive attitude towards employment.

Norway has changed the rules for admission to unemployment benefit systems so as to allow conscripts for compulsory military service to be admitted to the system.

Sweden's scheme of Labour Market Cash Assistance (KAS) applies to unemployed persons over the age of 16 who fulfil the usual requirements about being available for employment and who have an employment record of at least five months' employment in the 12 months before becoming unemployed. KAS can also be paid to a person completing a course at an upper secondary school or equivalent, and unable to find employment through the employment service for at least three months. The employment service will provide details of the forms of education and training for which cash assistance can be paid.

5. Innovations and New Strategies

Under this heading it is appropriate to consider several novel strategies which are being experimented within a number of countries :

- early retirement policies often associated with measures to stimulate replacement recruitment of young people ;
- a better co-ordinated and more coherent package of options for young people to ease the transition from school to work ;
- a switch of measures to stimulate demand for labour in favour of small but expanding firms and sectors, including some creations of youth co-operatives and joint ownership ventures.

i) Early Retirement of Older Workers and Employment of Young People

In Belgium there are three different sorts of pre-pension but only one of these, the pre-pension system instituted by the law of 30 March 1976, carries with it an obligation to engage a young person to replace the retiring worker. The other two concern redundant workers (collective agreement) and unemployed older workers. The pre-pension system instituted by the law of 30 March 1976 concerns male workers aged 60 or more and female workers aged 55 or more, whether they are employed in the private sector or (since 1979) temporary workers in the public sector who decide to retire early and claim the pre-pension. The decision to claim this benefit obliges the firm to replace the retired employee by an unemployed young person under 30 not already engaged by the firm nor working there as a stagiaire. The retiring worker receives his/her pre-pension which is made up of the amount of unemployment benefit due and 50 per cent of the difference between that amount and previous monthly earnings below a ceiling figure. The young person engaged has to be maintained in his job for six months or be replaced by another young person under 30. At the end of 1979 over 31,000 older workers had opted for the pre-pension and over 29,000 younger workers had already been engaged as replacements.

In Denmark older workers, members of the Unemployment Insurance Funds and aged between 60 and 66, are allowed to retire early under a scheme which was introduced in 1979 in the hope that this would improve the employment prospects of unemployed younger persons. The retiring worker is entitled to special rates of benefits which decrease gradually over time (e.g. for a full-time worker D.Kr. 70,000 for the first 2 1/2 years, 56,000 for the next 2 and 42,000 subsequently until normal retirement age). Those opting for early retirement are allowed to do a small amount of paid work without endangering their entitlement to early retirement benefit. Applications under this scheme far surpassed official expectations, some 50,000 workers applied in 1979 (out of a total labour force of 1.7 million) instead of the estimated 17,000 and the expenditure figure rose from the estimate of D.Kr. 345 million to over D.Kr. 1 billion. Many of the first applicants were people who were already unemployed, men heavily outnumbered women (80/20) and amongst those leaving employment unskilled workers of both sexes from the basic industries and textiles predominated. The extent to which the scheme has helped alleviate unemployment of young people is however uncertain at this time.

Finland has a scheme of unemployment pensions but this could only relieve youth unemployment to the extent that the target group (persons 60 or over who have received unemployment benefit or assistance for at least 200 days in the past 60 weeks and whom the authorities have been unable to place) would otherwise have

competed for jobs with young unemployed persons. There have been plans to lower the age for unemployment pensions from 60 to 55 because of the unfavourable unemployment situation. There has also been some discussion of introducing some downward flexibility in ordinary national retirement pensions, which could be expected to have a more perceptible influence on youth unemployment, but no precise details have yet been drawn up. The State has however been supporting the idea of voluntary retirement of employees on reaching 63, provided that the employer hires an unemployed person under 25.

In France the two agreements concerning guaranteed income for redundant workers over 60 and retiring workers over 60 (garantie de ressources après licenciement - garantie de ressources après démission) constitute what is known as pre-retirement schemes. Only those qualifying for the latter category are likely to lead to any appreciable increase in the job opportunities open to young people. At the end of 1978 a total of 43,000 persons were obtaining this benefit (equal to 70 per cent of previous earnings below a ceiling), just over 50 per cent of them being manual workers (5 per cent unskilled, 17 per cent semi-skilled and 28 per cent skilled).

The United Kingdom has the Job Release Scheme under which, as it currently operates, men aged 64 and women aged 59 (i.e. within one year of the statutory pensionable age) or disabled men aged 60 can retire with a tax-free allowance of £ 40 per week for a married person whose spouse's income was small, payable up to statutory pensionable age, provided that the employer engages an unemployed younger worker as a remplacement. The expected take-up of this scheme in 1979/80 was in the order of 80,000 persons. Whilst this scheme is not specifically directed at unemployed young persons, they are thought to have been the chief beneficiaries from it.

ii) Better Co-ordinated and More Coherent Options for Young People

Many young people, even in areas of persistently high unemployment, make the transition relatively smoothly. But for others, even in areas of low unemployment and at times when job openings are numerous, the same transition process is much more difficult, frustrating for the young person and those he/she comes in contact with and unproductive for society. For these reasons a graduated set of programmes is required which can be adapted to the needs of individual young persons. An important premise for drawing up such programmes is that unless they are capable of helping those with the greatest difficulties, they are instead likely to compound problems, accentuating the gap between those able to gain access to stable, satisfying employment with good working conditions and promotion prospects and those who oscillate between unemployment and employment in unstable or unsatisfying jobs. There are evident risks of social problems being aggravated by this inability to integrate into the world of work, which will quite possibly be interpreted as (yet another) failure.

As instances of programmes which have been or are being developed under this line of reasoning, a number of countries may be quoted. Australia is developing a Comprehensive School to Work Transition Policy which aims ultimately at providing young people in the 15 to 19 age group with options in education, training and employment, or any combination of these, either part-time or full-time, so that

unemployment will be the least acceptable alternative. The primary concern of the programme is the 50,000 young people who now leave school each year with poor employment prospects, and those in school likely to be in similar difficulties when their turn comes to leave. The intention is that appropriate education and training should be given for these groups. Pre-apprenticeship and pre-employment courses and the educational programme for unemployed youth in the Technical and Further Education sector will therefore be expanded and developed for those who have left school. An additional 7,000 places could become available in 1980 with substantial further increases in later years. For those still at school, improved techniques for identifying those likely to be at risk, improved vocational education and counselling services and alternative courses for "at risk" students are the main thrusts. Other developments may include extensions of work experience and community service involving students at school and of link courses combining elements of secondary and technical and further education courses. The government, in adopting this new policy in November 1979, offered to commit Aus. $ 150 million to it over the next five years and the state governments are also expected to commit funds to the programme after 1980.

In Denmark a Youth Guarantee proposal was put forward by the Ministers of Education and Labour towards the end of 1979. It was aimed at young people under 25 who were (a) either unemployed or not in education or training by 15 January in the year after leaving school, or (b) unemployed for at least one year. The guarantee is that each unemployed young person should have a right to either at least 9 months uninterrupted education leading to a job or access to further education, or at least 9 months' work experience with the prospect of permanent employment, or at least 12 months' participation in a project combining education and work experience. At first, it would apply to an estimated 7,000 persons (70 per cent girls) in the whole country, i.e. those who left school in June 1979 and would still be without either work or education/training on 15 January 1980, together with those who at the beginning of January 1980 would have been unemployed for the whole of 1979. Each month it is expected a further 700 young persons would qualify for the guarantee. But to begin with, the guarantee will only be implemented in two regions with an estimated 1,500 young persons qualifying under it. Other regions will be added later so that the whole country is covered by 1981. The guarantee lays its main stress on educational/training options. This requires an expansion of places available in the education system, more flexibility in vocational education and expansion of training courses, especially for social and health service professions. The estimated cost to the State in 1980 is D.Kr. 25 million with additional expenditure falling on local authorities. The scheme involves collaboration between the employment service, charged with supervising the work experience and job components of the guarantee, local authorities, the Ministry of Education and the Training Directorate, all of whom are involved in the educational elements of the scheme.

Denmark has also created a new Employment Secretariat which is reponsible for strengthening and improving the effectiveness of measures for young people, women and the long-term unemployed. Among its main responsibilities is to ensure close co-operation between the various ministries and local government and other authorities

in the planning, preparation and implementation of new and existing measures on behalf of young persons. It is assisted by an Advisory Committee (on which the various groups interested are represented) which assesses the effectiveness of the measures taken. The Ministry of Education also has a special Youth Unemployment Section which maintains close daily contact with the Employment Secretariat.

Finland is considering recommendations from the Young Persons' Employment Committee to the effect that Finland should also prepare a Youth Guarantee.

The National Employment Pact in France falls into this category even though there is no specific undertaking that all young people should have options from which to choose by a particular date. Contrary to the Danish, Norwegian and Swedish schemes (see below), the French Pact has the strengthening of employment as its main vehicle rather than an improvement of the level of education or training. Thus, it contains the following measures which all have an employment element and most of which also entail some training or work experience :

- New engagements of young people under 26 who have finished studies, vocational training or national service less than a year ago. The employer pays only 50 per cent of the employer's social security contributions during up to a year, provided that the enterprise making the engagement has increased its total labour force at the end of the year compared to the previous year and the engagement lasts a minimum of six months.
- A first engagement of a salaried employee is made by an artisan, in which case a premium of Frs. 5,000 can be paid. This can be combined with the reduced rate of employers' social security contributions noted above when the appropriate conditions are fulfilled. Similarly, small firms which in 1979 or 1980 pass the threshold of nine employees, which would normally entail financial participation in a number of schemes designed to share costs more evenly, are given reductions in the amounts which serve as the basis for the calculation of these contributions. Here, too, it is possible to combine this benefit with reduced employers' social security contributions where appropriate.
- Young people 17-26 are offered Employment/Training Contracts (already described above).
- Young people aged 16-20 are offered apprenticeship contracts (no employers' social security contributions are needed for the first year of the contract, extended to the full duration of the contract for artisans).
- Practical work experience courses in enterprises (stages pratiques en entreprise) for young people 18-26 years old.

Ireland has concentrated on improving the administrative machinery for studying the youth unemployment problem and proposing possible measures to attenuate it. This took the form of the Employment Action Team which was set up in September 1977. The Team made a number of recommendations, many of which have been implemented and referred to in this annex : the Work Experience Programme, Environmental Improvements Scheme, recruitment of apprentices by local authorities, the Development Officers Employment Scheme, training in language and marketing skills and temporary employment

of young unemployed on survey work. The Team was disbanded in 1979 and its responsibilities were taken over by the Manpower Consultative Committee.

Norway has undertaken to elaborate a Youth Guarantee to ensure that all young people under 20 should have an opportunity of further education or employment. As in the other Scandinavian guarantee schemes, the emphasis is on intensifying education and training - two-thirds of the expansion is planned in vocational fields and the long-term budget 1980-83 envisages increases in secondary school pupil capacity of 5,000 in 1980 and 1981 and 4,000 in the following years up to 1985. Those young people who do not apply for, or are not accepted by, the upper secondary school or who drop out of the course should be offered either employment or participation in a vocational guidance programme, vocational training or a combination of training and employment. Implementing the guarantee requires contact-promotion activities so that young people can be informed of the different possibilities open to them (an area where conventional services do not seem to have been altogether successful, judging from pilot studies) and co-operation between school and labour market authorities.

In Sweden the Ministers of Labour and of Education jointly presented a proposal for a Youth Guarantee in August 1979. Its main intention was to ensure that the 15,000 young people who leave the compulsory school each year and who do not opt for upper secondary school should be able to get education/training and work experience at the enterprise level. This activity in the enterprise should be treated as forming part of the general upper secondary school curriculum. Enterprises agreeing to provide this would be paid a subsidy of S.Kr. 250 per young person per week. The curriculum to be followed within the enterprise would be in accordance with the overall objectives of upper secondary education. The education authorities would therefore have a degree of responsibility for the programme. Firms which could provide the education/training and work experience would be identified by the local labour market authorities and local councils. This new combination of theoretical education and practical work experience would normally last from 1 to 3 years for each participant. The legal status of participants could vary according to whether or not they were actually engaged for some of the time in normal production work. If they were, they would be regarded as employed by the firm, the education would be oriented more specifically to the firm's needs and the firm would receive a subsidy of S.Kr. 50 per day. If not engaged in normal production work, young people would get a study grant of S.Kr. 50 per day and the education/training could be drawn from several enterprises within a specific industrial sector. The overall costs of this scheme are estimated at S.Kr. 300 million a year.

The United Kingdom's Youth Opportunities Programme has already been referred to, mainly because of the work experience and training options which it provides. Like some of the other schemes referred to in this section, the target group was rather precisely defined : no Summer or Easter school leaver who remains unemployed at the following Easter should remain without the offer of a place under the programme. There have been a number of restatements of the target group, however, and for 1979/80 the Manpower Services Commission has been asked to ensure that by March 1980 no young person under 19 who left school in 1978/79, nor a young person

under 19 who has been unemployed for 12 months by this time, will be without an offer of a place. Generally, young people do not have to wait so long to be offered a place. The 1979/80 target of 220,000 entrants still remains, even though the government has made some reductions in the scope of the programme.(For 1980/81 the target has been set at 250-260,000 young persons). The options which are available include three courses designed to prepare young people for work and four different kinds of work experience courses. The first group comprises :

- assessment or employment induction courses (formal duration 2 weeks but often up to 6 weeks) ;
- short industrial courses (of an average length of 3 months) ;
- remedial or preparatory courses (of variable length according to the time the individual needs to achieve the objective, but averaging 26 weeks of duration).

The work experience schemes consist of :

- work experience on employers' premises (of 6 months length, the annual throughput being 60,000) ;
- project-based work experience (up to 12 months, annual throughput 15,000) ;
- training workshops (up to 12 months, annual throughput 10,000) ;
- community service (up to 12 months, annual throughput 15,000).

In the United States the Vice-Presidential Task Force on Youth Unemployment, together with the experimental measures being developed under the Youth Employment Demonstration Projects Act (see measures listed under next sub-heading), constitute another attempt to develop a better co-ordinated and more coherent approach to the employment problems of young people.

iii) Switch of Measures to Stimulate Labour Demand in Small Enterprises, Youth Enterprises and Co-operatives

The rationale behind this development is the conviction that the sectors which have traditionally been dominated by large-scale public or private sector firms with very large labour forces - basic industries, railways, post offices, chemicals, etc. - are very often facing severe problems of shedding labour as they adjust to new production processes and/or new market conditions. They are unlikely to be able to respond to any measures that might be contemplated to stimulate recruitment.(1) In addition to this, there is a widespread feeling that other large firms are unlikely to have their recruitement patterns altered by the emergence of temporary incentive schemes : their administrative procedures are well-established and their manpower and forward planning is reasonably well developed so that they will only alter their behaviour out of economic motives when a very large incentive is given.

1) In a paper by the Chairman of the British Steel Corporation, Sir Charles Villiers, on job creation in major steel closure areas (document No. 8 for the OECD Symposium on the Steel Industry in the 1980s, Paris, 27/28 February 1980) it is noted that "There is a growing consensus among politicians and informed observers that it is the small business which offers the best opportunity for job and national wealth creation over the next decade or so".

On the other hand, they may make such changes for other motives, such as contributing to the country's political stability, concern for a vulnerable sector of the community, etc. At the same time there is a continuing process of creation of new enterprises, many of which have a potential for development, even when macro-economic prospects are gloomy, but which founder because of inability to exploit a product market quickly enough, often through an inability to recruit at the right time. So some countries have developed incentives which apply only to firms with small labour forces. Belgium, for example, offers employment premiums to firms with fewer than 14 employees who engage new workers. Also it favours small firms under the scheme of compulsory stages by allowing those with fewer than 50 employees to get a subsidy for up to two stagiaires, whereas firms with more than 50 employees can only get the subsidy for stagiaires up to 2 per cent of their labour force. Denmark is fostering what are known as "Project Groups for Graduates" as a means of countering a specific unemployment problem of young people, namely the problems encoutered by increasing numbers of university graduates. The schemes aim to encourage their employment in small firms. Grants of up to D.Kr. 39 million will be made over a period of three years and by late 1979 a total of 300 had been employed in this way. France encourages recruitment by "artisans" and small-scale craft industries more than by other sectors (as noted in pages 115 and 130). France is also experimenting with a scheme called "Jeunes Entreprises" under which young people completing their courses at lycées are encouraged to found and run their own firm with guidance and backing from established enterprises and management executives. Ireland runs schemes for the benefit of trainees and apprentices in agriculture and for encouraging the employment of young people as development officers in youth, sport and other voluntary (i.e. non-profit-making) organisations. New Zealand has a Group Work Scheme under which work groups, trusts and co-operative ventures can be assisted by either wage subsidies or contracts when they engage unemployed young persons. Like Ireland, New Zealand also has a special scheme to promote agricultural employment, the Farm Employment Scheme, under which a subsidy of N.Z. $ 40 per week is paid for additional qualifying engagements, mainly those of young persons. The United Kingdom has a Small Firms Employment Subsidy, now restricted to manufacturing firms with fewer than 200 employees in the Special Development Areas of the country. It provides a subsidy of £ 20 per week for each additional employee engaged.

iv) More Isolated Innovations

There are a small number of measures which do not fit easily into the rather conventional classification adopted in this annex, but which nevertheless cannot be ignored. Canada, for instance, runs a Canada Manpower Mobility Programme as a general programme for unemployed persons, but about half the take-up is by young persons. It provides a comprehensive range of grants to facilitate the search for jobs, move and install the home in a new location and finance travel from old to new locations. What is perhaps more unusual is that it also includes reimbursement of travel costs for travel to take up temporary and seasonal jobs. Denmark is experimenting with combinations of productive work and education programmes under the guidance of local authorities. Finland has increased the number of "voluntary

conscripts" by 3,000 young men in 1979. The Finnish Defence forces employ a further 2,000 young persons as civilian assistants, most of them working part-time. The State also supports summer-time activities of municipalities and youth organisations in favour of unemployed youth. Ireland is setting up a National Hire Agency to exploit opportunities for temporary work. The Agency will act as employer, paying wages and social security contributions. Japan provides recreation centres for young employees. These combine welfare and guidance counselling services with the provision of leisure facilities for young people who would otherwise not have access to them and make it easier for young people to work away from their home areas.

The United States, in an effort to explore methods of dealing with the structural unemployment problems of youth, has launched a series of Youth Employment Demonstration Programs under the 1977 YED Projects Act. As the basic purpose of the programmes is to test the relative efficiency of different ways of dealing with these problems in different local contexts, considerable importance is attached to evaluating experience and follow-up after participants have left programmes. The Young Adult Conservation Corps is a small three-year programme with a capacity of 25,000 unemployed young persons aged 16-23 to get work experience through conservation and other similar jobs. Preference is given to youth from high unemployment areas. The Youth Employment and Training Programs should provide around 150,000 places in which low-income youth aged 14-21 can be given practical experience of a job in a supervised work setting so as to enhance their job prospects and career preparation. About one-quarter of funds under this programme go to projects for young people still at school. The Youth Community Conservation and Improvement Projects aim to develop the vocational potential of young unemployed aged 16-19 by providing work (for up to 22,000) in well-supervised community improvement projects. Youth Incentive Entitlement Pilot Projects seek to obtain information about ways in which high-school-age young people from poor homes can best be helped to complete their high school education. It provides about 20,000 jobs, either full-time during the summer or part-time during the school year. The Job Corps provides a mainly residential course lasting up to two years to provide additional education, training and intensive counselling for young people aged 14-21 from economically disadvantaged families. Capacity is being raised from 30,000 to 44,000 places. The Summer Youth Program provides summer work for young people (aged 14-19) mainly from economically disadvantaged households. In 1979 the programme catered for 944,000 young persons.

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PRINTED IN FRANCE
(800 TD 81 80 05 1) ISBN 92-64-12137-4